

ISSUE DATE: 1/15/1990

REVISION DATE: 4/15/2015

1. PRODUCT AND COMPANY IDENTIFICATION**GHS PRODUCT IDENTIFIER:**

TRADE NAME; CHEMSAFE CLEAR (CARB COMPLIANT)

OTHER MEANS OF IDENTIFICATION:**RECOMMENDED USE OF THE CHEMICAL AND RESTRICTIONS ON USE:**

RECOMMENDED USE: Mastic Removal

SUPPLIER'S DETAILS:

1480 GRANDVIEW AVE.
THOROFARE, NJ 08086
(800)767-6933

EMERGENCY PHONE NUMBER:

COMPANY PHONE NUMBER: (800)767-6933

(24HR) EMERGENCY NUMBER: CHEM-TREC (800)424-9300

2. HAZARD IDENTIFICATION**GHS CLASSIFICATION:**

GHS CLASSIFICATION SCALE: 1=SEVERE HAZARD, 4=SLIGHT HAZARD)

ASPIRATION HAZARD
SERIOUS EYE DAMAGE IRRITATION

CATEGORY 1
CATEGORY 2A

LABEL ELEMENTS:**SIGNAL WORD: DANGER****HAZARD STATEMENTS:**

Causes serious eye irritation
May be fatal if swallowed and enters airways

HAZARD SYMBOLS:**PRECAUTIONARY STATEMENTS:**

Keep out of reach of children
 Wash hands, face and all exposed skin areas after handling.
 Wear protective gloves/protective clothing/eye protection/face protection

PRECAUTIONARY STATEMENTS (RESPONSE):

IF SWALLOWED: Immediately call a poison center or doctor or physician. Do not induce vomiting.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

PRECAUTIONARY STATEMENTS (STORAGE):

Store locked up.

PRECAUTIONARY STATEMENTS (DISPOSAL):

Dispose of contents/container to an approved waste disposal plant in accordance with applicable local/regional/national and international regulations and product characteristics at time of disposal.

OTHER HAZARDS:

Repeated or prolonged exposure can cause skin dryness or cracking.

3. COMPOSITION INFORMATION ON INGREDIENTS

INGREDIENT IDENTITY	CAS NUMBER	PERCENTAGE
DISTILLATES, PETROLEUM HYDROTREATED, LIGHT	64742-47-8	PROPRIETARY
BUTOXYDIGLYCOL	112-34-5	PROPRIETARY

REMAINING INGREDIENTS ARE NOT REPORTABLE UNDER OSHA/SDS GUIDELINES. THE EXACT PERCENTAGES OF SOME INGREDIENTS HAVE BEEN WITHHELD AS (CBI) CONFIDENTIAL BUSINESS INFORMATION TRADE SECRET.

4. FIRST AID MEASURES

INGESTION: If swallowed, wash out mouth with water. Do not induce vomiting, this product is an aspiration hazard. If spontaneous vomiting occurs, keep head below hips to prevent aspiration of liquid into the lung. Never give anything by mouth to an unconscious person.

SKIN CONTACT: Remove contaminated clothing. Wash with soap and plenty of water for 15 minutes. Wash contaminated clothing before reuse. If irritation occurs get medical advice.

INHALATION: Move individual away from exposure and into fresh air. If breathing is irregular or stopped, administer artificial respiration. In case of shortness of breath, give oxygen. Call a physician immediately.

EYE CONTACT: Rinse cautiously with water for several minutes. Remove contact lenses if easy to do. Continue rinsing. If eye irritation persists, get medical attention/advice.

Most Important Symptoms and Effects, Acute and Delayed

INGESTION: Symptoms may include diarrhea, gastric pain, and vomiting.

SKIN CONTACT: Symptoms may include redness, dryness and cracking of skin.

INHALATION: Not expected; however, symptoms may include irritation of respiratory tract and/or CNS symptoms such as dizziness, confusion, drowsiness or fatigue.

EYE CONTACT: Symptoms may include stinging, tearing, redness and blurred vision.

Indication of immediate medical attention and special treatment needed, if necessary.

Treat Symptomatically.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media: Use fire extinguishers suitable for surrounding fire, possibly consisting of water spray, dry chemical, carbon dioxide, or foam.

Unsuitable extinguishing media- Do not use water jet.

Specific hazards arising from the chemical: In a fire or if heated, a pressure increase will occur and the container may burst. Material will burn in a fire. Flash point is over 200F. Material will emulsify and not directly float with water spray and emulsion could aid in not exacerbating fire.

Hazardous thermal decomposition products: carbon monoxide and CO₂

Special protective actions for fire-fighters: Keep product containers and surrounding areas cool with water spray. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters: Fire fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Avoid breathing vapor or mists. Put on appropriate personal protective equipment. Wear appropriate respirator when ventilation is inadequate.

For emergency responders: If specialized clothing is required to deal with the spillage, take note of information in section 8 for further information. See also information in non-emergency personnel above.

Environmental precautions: Avoid dispersal of spilled material with soil, waterways, drains and sewers. See section 12 for additional ecological information.

Methods and materials for containment and cleaning up.

Small spill: Stop leak if without risk. Move containers from the spill area. Absorb with an inert dry non combustible material such as diatomaceous earth or vermiculite and place in an appropriate waste disposal container. Mop any remaining residues with soap and water and dispose of wastes via a licensed waste disposal contractor according to federal, state and local regulations.

Large spill: Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, drains, water courses and confined areas. Wash spillages into an effluent treatment plant or absorb with an inert dry non combustible material such as diatomaceous earth or vermiculite and place in a appropriate waste disposal containers. Mop any remaining residues with soap and water and dispose of wastes via a licensed waste disposal contractor according to federal, state and local regulations.

7. HANDLING AND STORAGE

Precautions for Safe Handling:

Safe Handling Advice: Utilize appropriate personal protective equipment when handling product. Do not swallow. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mists. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container and tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. No smoking. Wash face, hands and any exposed skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection and face protection during use. Emptied containers can contain product residues and remain hazardous. Do not reuse, flame cut, braze or weld container and observe all sds information around empty containers and dispose of in accordance with federal, state and local regulations.

Advice on general occupational hygiene: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also section 8 for additional hygiene information.

Conditions for safe storage including any incompatibilities:

Store in original container in a dry, cool and well ventilated area away from strong oxidizing agents (see section 10) and food and drink. Store locked up. Eliminate all ignition sources. Keep container tightly closed when not in use. Do not store in unlabeled containers.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

<u>Control Parameters</u>	<u>Occupational Exposure Limits</u>			
	<u>Ingredient Identity</u>	<u>ACGIH TLV</u>	<u>OSHA PEL</u>	<u>NIOSH IDLH</u>
Butoxydiglycol	112-34-5	TWA 10ppm		

Distillates, Petroleum TWA:skin absorption 200mg/m3 (as total hydrocarbon vapor) 8 hours
Hydrotreated, Light 64742-47-8

Appropriate Engineering Controls

Engineering Controls: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants and air concentrations below occupational exposure standards.

Individual protection measures, such as personal protective equipment. (PPE)

Eye/Face Protection: Wear approved tightly sealed safety goggles

Skin & Body Protection: Wear chemical resistant, impervious gloves at all times when handling chemical products. Check during use that gloves are still retaining their impervious properties, as the time for breakthrough can change from different manufacturers and chemical mixtures cannot always be accurately measured. Appropriate footwear and suitable protective clothing should be worn for the degree and risk of exposure.

Respiratory Protection: If workplace exposure limits of product or any component is exceeded, utilize proper respiratory protection program guidelines (see OSHA 1910.134 and American National Standard ANSI Z88.2) Use a properly fitted NIOSH/MSHA air-purifying or air-fed respirator in compliance with the above mentioned standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: clear liquid
Odor: near odorless
Odor threshold: not available
pH: not applicable
Melting Point/Freezing Point: -56F
Initial Boiling Point/Range: 344F-473F
Flash Pt: >200F lowest ingredient, does not sustain combustion
Evaporation Rate: <1 (butyl acetate=1)
Lower explosive limits: .6%Aliphatic Solvent
Upper explosive limits: 5.5%Aliphatic Solvent
Vapor Pressure: meets CARB guidelines
Vapor Density: 4.5-5 (air=1)
Relative Density: .84
Solubility in water: Emulsifies
Partition coefficient: not applicable
Auto ignition temp: >428F
Decomposition Temp: not available
Viscosity: pourable liquid

10. STABILITY AND REACTIVITY

Reactivity: Stable in normal ambient temperature and pressure

Chemical Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: not under normal conditions of storage and use.

Conditions to Avoid: Open flames, sparks

Incompatible Materials: Oxidizing materials

Hazardous Decomposition Products: Carbon monoxide and Carbon Dioxide

11. TOXICOLOGICAL INFORMATION

Acute toxicity: Not classified,

Skin corrosion irritation: not classified,

Serious Eye damage: classified, Category 2, Causes serious eye irritation, Butoxydiglycol 112-34-5

Sensitization: Not classified,

Mutagenicity: Not classified,

Carcinogenicity: Not classified

Reproductive Toxicity: Not Classified

Teratogenicity: Not Available

Specific target Organ Toxicity (single exposure)

Not classified

Specific target Organ Toxicity (repeated exposure):

Not classified

Aspiration Hazard:

Distillate petroleum hydrotreated, light 64742-47-8 , Aspiration Hazard Category 1

Information on the likely routes of exposure:**Ingestion:** May be harmful if swallowed. May be fatal if swallowed and enters airways.**Inhalation:** Do not breathe vapors or mists.**Skin:** May be harmful in contact with skin.**Eye:** Causes serious eye irritation**Symptoms related to the physical, chemical and toxicological characteristics****Ingestion:** See section iv, most important symptoms and effects, acute and delayed.**Inhalation:** See section iv, most important symptoms and effects, acute and delayed.**Skin:** See section iv, most important symptoms and effects, acute and delayed.**Eye:** See section iv, most important symptoms and effects, acute and delayed.**Delayed and immediate effects and also chronic effects from short and long term exposure.**

General: Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis

Carcinogenicity: no known significant effects or critical hazards. Not classifiable.

Numerical measures of Toxicity

Not Available

12. ECOLOGICAL INFORMATION**Toxicity:**

<u>Ingredient name</u>	<u>Result</u>	<u>Species</u>	<u>Exposure</u>
Distillate Petroleum, Hydrotreated, light	Chronic NOEL 0.48 mg/l	Daphnia	21 days

Persistence and degradability:Distillate Petroleum: Biodegradability-inherent
Hydrotreated

Butoxydiglycol 112-34-5: readily biodegradable

Bioaccumulation Potential:

Not expected to bioaccumulate

Mobility in Soil:

No data

Other adverse Effects:

No known significant effects or critical hazards

13. DISPOSAL CONSIDERATIONS

Dispose in accordance with applicable federal, state and local regulations.

14. TRANSPORTATION INFORMATION

DOT: NOT REGULATED
IATA: NOT REGULATED
IMDG: NOT REGULATED

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS: All ingredients are listed or exempted with TSCA.

SARA 302/304: no products were found.

SARA 311/312: acute health hazard

Ingredient	%	FIRE HAZARD	PRESSURE RELEASE	REACTIVE	IMMEDIATE ACUTE	DELAYED CHRONIC
Distillate Petroleum, Hydrotreated	80-95	YES	NO	NO	NO	NO
Butoxydiglycol 112-34-5	PROPRIETARY				YES	YES

SARA 313: butoxydiglycol, <12%

STATE REGULATIONS:

Ingredient	New York	New Jersey	Massachusetts	Pennsylvania
Distillate Petroleum Hydrotreated. 64742-47-8	No	No	No	No
Butoxydiglycol 112-34-5	No	Yes	Yes	yes

California Prop 65: none known

16. OTHER INFORMATION

HMIS RATING: HEALTH (1) FIRE (1) REACTIVITY (0)
 4=EXTREME, 3=HIGH, 2=MODERATE, 1=SLIGHT, 0=INSIGNIFICANT

NOTICE TO READER:

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. The information on this sds was obtained from sources which we believe are reliable. However, the information is provided without any warranty, expressed or implied, regarding its correctness. Users are advised to confirm in advance of need, that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the sds. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed.

ISSUE DATE: 1/15/1990

REVISION DATE: 1/31/2021

1. PRODUCT AND COMPANY IDENTIFICATION**GHS PRODUCT IDENTIFIER:**

TRADE NAME; CHEMSAFE 100

OTHER MEANS OF IDENTIFICATION:**RECOMMENDED USE OF THE CHEMICAL AND RESTRICTIONS ON USE:**

RECOMMENDED USE: Mastic Removal

SUPPLIER'S DETAILS:

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(800)767-6933

EMERGENCY PHONE NUMBER:

COMPANY PHONE NUMBER: (800)767-6933
(24HR) EMERGENCY NUMBER: CHEM-TREC (800)424-9300

2. HAZARD IDENTIFICATION**GHS CLASSIFICATION:**

GHS CLASSIFICATION SCALE: (1=SEVERE HAZARD, 4=SLIGHT HAZARD)

PHYSICAL HAZARDS:

FLAMMABLE LIQUIDS CATEGORY 4

HEALTH HAZARDS:

ASPIRATION HAZARD CATEGORY 1
ACUTE TOXICITY- INHALATION (VAPORS) CATEGORY 3
ACUTE TOXICITY-ORAL CATEGORY 4
SKIN CORROSION/ IRRITATION CATEGORY 3 (GHS only - not recognized severity by OSHA)
SERIOUS EYE DAMAGE IRRITATION CATEGORY 2
SPECIFIC TARGET ORGAN SYSTEMIC CATEGORY 3
TOXICITY-SINGLE EXPOSURE, NARCOTIC EFFECTS (DIZZINESS)

LABEL ELEMENTS:**SIGNAL WORD: DANGER****HAZARD STATEMENTS:**

Combustible liquid
Toxic if inhaled
Harmful if swallowed
Causes mild skin irritation (GHS only - not recognized severity by OSHA)
Causes serious eye irritation
May be fatal if swallowed and enters airways
May cause drowsiness or dizziness

HAZARD SYMBOLS:**PRECAUTIONARY STATEMENTS:**

Keep out of reach of children
 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
 Keep container tightly closed.
 Keep cool
 Avoid breathing dust/fume/gas/mist/vapours/spray.
 Wash hands, face and all exposed skin areas after handling.
 Do not eat, drink, or smoke when using this product.
 Use only outdoors or in a well ventilated area.
 Wear protective gloves/protective clothing/eye protection/face protection

PRECAUTIONARY STATEMENTS (RESPONSE):

IF SWALLOWED: Immediately call a poison center or doctor or physician. Do not induce vomiting. Rinse mouth.

If SKIN IRRITATION OCCURS: get medical advice/attention. (GHS only - not recognized severity category by OSHA)

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor or physician.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

IN CASE OF FIRE: Use dry chemical, co2 or foam to extinguish

PRECAUTIONARY STATEMENTS (STORAGE):

Store in a well ventilated place, keep container tightly closed. Keep cool. Store locked up.

PRECAUTIONARY STATEMENTS (DISPOSAL):

Dispose of contents/container to an approved waste disposal plant in accordance with applicable local/regional/national and international regulations and product characteristics at time of disposal.

OTHER HAZARDS:

Repeated or prolonged exposure can cause skin dryness or cracking.

3. COMPOSITION INFORMATION ON INGREDIENTS

INGREDIENT IDENTITY	CAS NUMBER	PERCENTAGE
Hydrotreated Light Distillate	64742-47-8	PROPRIETARY
2-butoxyethanol	111-76-2	PROPRIETARY

REMAINING INGREDIENTS ARE NOT REPORTABLE UNDER OSHA/SDS GUIDELINES. THE EXACT PERCENTAGES OF SOME INGREDIENTS HAVE BEEN WITHHELD AS (CBI) CONFIDENTIAL BUSINESS INFORMATION TRADE SECRET.

4. FIRST AID MEASURES

INGESTION: If swallowed, call a poison control center immediately. Wash out mouth with water. Do not induce vomiting; this product is an aspiration hazard. If spontaneous vomiting occurs, keep head below hips to prevent aspiration of liquid into the lung. Never give anything by mouth to an unconscious person.

SKIN CONTACT: Remove contaminated clothing. Wash with soap and plenty of water for 15 minutes. Wash contaminated clothing before reuse. If irritation occurs get medical advice.

INHALATION: Move individual away from exposure and into fresh air. If breathing is irregular or stopped, administer artificial respiration. In case of shortness of breath, give oxygen. Call a physician immediately.

EYE CONTACT: Rinse cautiously with water for several minutes. Remove contact lenses if easy to do. Continue rinsing. If eye irritation persists, get medical attention/advice.

Most Important Symptoms and Effects, Acute and Delayed

INGESTION: Symptoms may include diarrhea, gastric pain, and vomiting.

SKIN CONTACT: Symptoms may include redness, dryness and cracking of skin.

INHALATION: Symptoms may include irritation of respiratory tract and/or CNS symptoms such as dizziness,

confusion, drowsiness or fatigue.

EYE CONTACT: Symptoms may include stinging, tearing, redness and blurred vision.

Indication of immediate medical attention and special treatment needed, if necessary.

Treat Symptomatically.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media: Use fire extinguishers rated for class B fires. CO₂, Foam.

Unsuitable extinguishing media- Do not use water jet. If water is used utilize fog nozzle or apparatus.

Specific hazards arising from the chemical: Combustible liquid. In a fire or if heated, a pressure increase will occur and the container may burst. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

Hazardous thermal decomposition products: carbon monoxide and CO₂

Special protective actions for fire-fighters: Keep product containers and surrounding areas cool with water spray. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters: Fire fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No Flares, smoking or flames in hazard

area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders: If specialized clothing is required to deal with the spillage, take note of information in section 8 for further information. See also information in non-emergency personnel above.

Environmental precautions: Avoid dispersal of spilled material with soil, waterways, drains and sewers. See section 12 for additional ecological information.

Methods and materials for containment and cleaning up.

Small spill: Stop leak if without risk. Move containers from the spill area. Use spark proof tools and equipment. Absorb with an inert dry non combustible material such as diatomaceous earth or vermiculite and place in an appropriate waste disposal container. Mop any remaining residues with soap and water and dispose of wastes via a licensed waste disposal contractor according to federal, state and local regulations.

Large spill: Stop leak if without risk. Move containers from spill area. Use spark proof tools and equipment. Prevent entry into sewers, drains, water courses and confined areas. Wash spillages into an effluent treatment plant or absorb with an inert dry non combustible material such as diatomaceous earth or vermiculite and place in a appropriate waste disposal containers. Mop any remaining residues with soap and water and dispose of wastes via a licensed waste disposal contractor according to federal, state and local regulations.

7. HANDLING AND STORAGE

Precautions for Safe Handling:

Safe Handling Advice: Utilize appropriate personal protective equipment when handling product. Do not swallow. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mists. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container and tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. No smoking. Wash face, hands and any exposed skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection and face protection during use. Groundbond container and receiving equipment during transfer. Do not flame cut, braze or weld emptied containers as they contain product residues and all precautions within this sds still apply and should be followed.

Advice on general occupational hygiene: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also section 8 for additional hygiene information.

Conditions for safe storage including any incompatibilities:

Store in original container in a dry, cool and well ventilated area away from strong oxidizing agents (see section 10) and food and drink. Store locked up. Eliminate all ignition sources. Keep container tightly closed when not in use. Do not store in unlabeled containers.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION**Control Parameters****Occupational Exposure Limits**

<u>Ingredient Identity</u>	<u>ACGIH TLV</u>	<u>OSHA PEL</u>	<u>NIOSH IDLH</u>
2-butoxyethanol 111-76-2	TWA 20ppm	TWA 50ppm TWA 240mg/m3	IDLH 700ppm
Hydrotreated light distillate 64742-47-8	TWA: skin absorption 8 hours	200mg/m3 (as total hydrocarbon vapor)	

Appropriate Engineering Controls

Engineering Controls: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants and air concentrations below occupational exposure standards. Use spark proof ventilation equipment.

Individual protection measures, such as personal protective equipment. (PPE)

Eye/Face Protection: Wear approved safety goggles with side shields

Skin & Body Protection: Wear chemical resistant, impervious gloves at all times when handling chemical products. A chemical resistant apron is also recommended. Check during use that gloves and aprons are still retaining their impervious properties, as the time for breakthrough can change from different manufacturers and chemical mixtures cannot always be accurately measured. Appropriate footwear and suitable protective clothing should be worn for the degree and risk of exposure.

Respiratory Protection: If workplace exposure limits of product or any component is exceeded, utilize proper respiratory protection program guidelines (see OSHA 1910.134 and American National Standard ANSI Z88.2) Use a properly fitted NIOSH/MSHA air-purifying or air-fed respirator in compliance with the above mentioned standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: blue liquid

Odor: mild solvent

Odor threshold: not available

pH: not applicable

Melting Point/Freezing Point: -56F

Initial Boiling Point/Range: 344F; 344-470F

Flash Pt: 145F-150F closed cup, does not sustain combustion

Evaporation Rate: <1 (butyl acetate=1)

Lower explosive limits: .6% Aliphatic Solvent

Upper explosive limits: 5.5% Aliphatic Solvent

Vapor Pressure: .56-.6 mmHg (room temperature)

Vapor Density: 4.5-5 (air=1)

Relative Density: .82

Solubility in water: Emulsifies

Partition coefficient: not applicable

Auto ignition temp: >428F

Decomposition Temp: not available

Viscosity: not applicable

10. STABILITY AND REACTIVITY

Reactivity: Stable in normal ambient temperature and pressure

Chemical Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: not under normal conditions of storage and use.

Conditions to Avoid: Avoid all possible sources of ignition. Do not pressurize, cut weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.

Incompatible Materials: Oxidizing materials

Hazardous Decomposition Products: Carbon monoxide and Carbon Dioxide

11. TOXICOLOGICAL INFORMATION

Acute toxicity: classified, Category 3 inhalation, Category 4 Oral

Hydrotreated light 64742-47-8 Dermal LD50 >2000mg/kg rabbit

Distillate Oral LD50 >5000mg/kg rat

Inhalation LC50 4.3mg/l

2-butoxyethanol 111-76-2 Dermal LD50 >2000mg/kg guinea pig

Oral LD50 1414mg/kg guinea pig

Inhalation LC0 3.1mg/l guinea pig >641ppm

Skin corrosion irritation: GHS classified only, Category 3, Causes mild skin irritation, 2-butoxy ethanol 111-76-2, OSHA does not recognize category 3 as a severity category.

Serious Eye damage: classified, Category 2, Causes serious eye irritation, 2-butoxyethanol 111-76-2

Sensitization: Not classified

Mutagenicity: Not classified

Carcinogenicity: Not classified

Reproductive Toxicity: Not Classified

Teratogenicity: Not Available

Specific target Organ Toxicity (single exposure):

<u>Name</u>	<u>category</u>	<u>route of exposure</u>	<u>target organs</u>
Hydrotreated light 64742-47-8 , Distillate	3,	n/a	narcotic effects, drowsiness or dizziness
2-butoxyethanol 111-76-2,	3,	inhalation	narcotic effects, drowsiness or dizziness

Specific target Organ Toxicity (repeated exposure)

Not Available

Aspiration Hazard:

Hydrotreated Light Distillate 64742-47-8 , Aspiration Hazard Category 1

Information on the likely routes of exposure:

Ingestion: May be harmful if swallowed. May be fatal if swallowed and enters airways.

Inhalation: Toxic if inhaled

Skin: Causes skin irritation.

Eye: Causes serious eye irritation

Symptoms related to the physical, chemical and toxicological characteristics

Ingestion: See section iv, most important symptoms and effects, acute and delayed.

Inhalation: See section iv, most important symptoms and effects, acute and delayed.

Skin: See section iv, most important symptoms and effects, acute and delayed.

Eye: See section iv, most important symptoms and effects, acute and delayed.

Delayed and immediate effects and also chronic effects from short and long term exposure.

General: Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis

Carcinogenicity: no known significant effects or critical hazards. Not classifiable.

Numerical measures of Toxicity

Not Available

12. ECOLOGICAL INFORMATION

Toxicity:

<u>Ingredient name</u>	<u>Result</u>	<u>Species</u>	<u>Exposure</u>
Hydrotreated Light Distillate	Chronic NOEL 0.48 mg/l	Daphnia	21 days

Persistence and degradability:

Hydrotreated Light Distillate: Biodegradability-inherent

2-butoxyethanol: 90.4% readily biodegradable after 28 days.

Bioaccumulation Potential:

2-butoxyethanol: BCF 3.16, this material is not expected to bioaccumulate

Mobility in Soil:

2-butoxyethanol: low adsorption to soil particulates predicted

Other adverse Effects:

No known significant effects or critical hazards

13. DISPOSAL CONSIDERATIONS

Dispose in accordance with applicable federal, state and local regulations.

14. TRANSPORTATION INFORMATION**DOT:**

This product is NOT REGULATED if packaged under 119 gallons per container by DOT when shipping in North America.

UN ID # NA1993
 SHIPPING NAME: COMBUSTIBLE LIQUID, N.O.S. (CONTAINS PETROLEUM DISTILLATES)
 HAZARD CLASS: 3
 PACKING GROUP: III
 RQ N/A
 PLACARDING: PLACARDING EXEMPTION 173.150F

IATA: NOT REGULATED

IMDG: NOT REGULATED

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS: All ingredients are listed or exempted with TSCA.

SARA 302/304: no products were found.

SARA 311/312: fire hazard, acute, chronic

Ingredient	%	FIRE HAZARD	PRESSURE RELEASE	REACTIVE	IMMEDIATE ACUTE	DELAYED CHRONIC
Hydrotreated Light Distillate	80-95	YES	NO	NO	NO	NO
2butoxyethanol 111-76-2	PROPRIETARY	YES			YES	YES

SARA 313

2-butoxyethanol 111-76-2 PROPRIETARY, REPORTING THRESHOLD-1%

STATE REGULATIONS:

Ingredient	New York	New Jersey	Massachusetts	Pennsylvania
Hydrotreated Light Distillate 64742-47-8	No	No	No	No
2-butoxyethanol 111-76-2	No	Yes	Yes	yes

California Prop 65: none known

16. OTHER INFORMATION

HMIS RATING: HEALTH (1) FIRE (2) REACTIVITY (0)
4=EXTREME, 3=HIGH, 2=MODERATE, 1=SLIGHT, 0=INSIGNIFICANT

NOTICE TO READER:

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. The information on this sds was obtained from sources which we believe are reliable. However, the information is provided without any warranty, expressed or implied, regarding its correctness. Users are advised to confirm in advance of need, that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the sds. /furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed.

Chemsafe Solvex Clear Odorless Mastic Remover

Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date: 09/20/2019

Supersedes: All previous versions

Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name : Chemsafe Solvex Clear Odorless Mastic Remover
Product form : Mixture

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Mastic adhesive removal

1.3. Details of the supplier of the safety data sheet

Aramco Inc.
1480 Grandview Avenue
Paulsboro, NJ 08066
Toll-free: (800)767-6933
Local: (856)686-7700
www.aramco.com

1.4. Emergency telephone number

Emergency number : 1-866-359-5661

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Aspiration Toxicity Category 1	H304
Skin Irritation Category 2	H315
Eye Irritation Category 2	H319

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :



GHS08

GHS07

Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

H315 - Causes skin irritation
H319 - Causes serious eye irritation
H304 - May be fatal if swallowed and enters airways

Precautionary statements (GHS-US) :

P264 - Wash hands thoroughly after handling.
P280 - Wear eye protection, protective clothing, protective gloves
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P362 - Take off contaminated clothing and wash before reuse.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P331 - If swallowed, do NOT induce vomiting
P370+P378 - In case of fire: Use dry chemical, foam, CO2 for extinction
P403+P235 - Store in a well-ventilated place. Keep cool
P405 - Store locked up
P501 - Dispose of contents/container to licensed waste handling facility

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

No data available

Chemsafe Solvex Clear Odorless Mastic Remover

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Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%
Petroleum distillates, hydrotreated light	(CAS No) 64742-47-8	Proprietary*
2-(2-butoxyethoxy)ethanol	(CAS No) 112-34-5	Proprietary*
Surfactant	(CAS No) Proprietary*	Proprietary*

*The specific chemical identity and exact percentage of composition has been withheld as a trade secret

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
- First-aid measures after skin contact : IF ON SKIN: Immediately rinse with plenty of soap and water (for at least 15 minutes). If skin irritation occurs, get medical advice/attention.
- First-aid measures after eye contact : IF IN EYES: Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes minimum). Remove contact lenses, if present and easy to do so. Continue rinsing. If eye irritation occurs, get medical advice/attention.
- First-aid measures after ingestion : IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries : May be fatal if swallowed and enters airways.
- Symptoms/injuries after inhalation : Inhalation in high concentrations may cause irritation of the mucous membranes. Solvent vapors are hazardous and may cause nausea, sickness and headaches. Aspiration of this material into the lungs may cause chemical pneumonia or death.
- Symptoms/injuries after skin contact : Contact during a long period may cause light irritation.
- Symptoms/injuries after eye contact : Direct contact with the eyes is likely to be irritating.
- Symptoms/injuries after ingestion : Acute ingestion causes CNS depression, oropharyngeal and gastric pain and vomiting.
- Chronic symptoms : No data available.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Dry chemical. Carbon dioxide. Foam.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : This material is an NFPA IIIB combustible liquid.
- Explosion hazard : Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.
- Reactivity : No dangerous reactions known under normal conditions of use.

5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Do not dispose of fire-fighting water in the environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Evacuate area. Keep upwind. Ventilate area. Spill should be handled by trained clean-up crews properly equipped with respiratory equipment and full chemical protective gear (see Section 8).

6.1.1. For non-emergency personnel

- Protective equipment : Wear Protective equipment as described in Section 8.
- Emergency procedures : Evacuate unnecessary personnel.

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Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

6.1.2. For emergency responders

Protective equipment : Wear suitable protective clothing, gloves and eye or face protection. Approved supplied-air respirator, in case of emergency.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Foam may be used to suppress vapors.

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Place in a suitable container for disposal in accordance with the waste regulations (see Section 13).

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Do not handle until all safety precautions have been read and understood. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Do not breathe mists. Keep away from sources of ignition - No smoking.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Heat sources. Keep container closed when not in use.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Petroleum distillates, hydrotreated light (64742-47-8)	
Remark (ACGIH)	OELs not established
Remark (US OSHA)	OELs not established

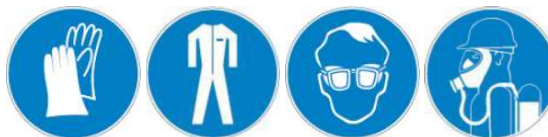
2-(2-butoxyethoxy)ethanol (112-34-5)	
Remark (ACGIH)	TWA - 10 ppm
Remark (US OSHA)	OELs not established

Surfactant (Proprietary*)	
Remark (ACGIH)	OELs not established
Remark (US OSHA)	OELs not established

8.2. Exposure controls

Appropriate engineering controls : Ensure adequate ventilation, especially in confined areas.

Personal protective equipment : Gloves. Protective clothing. Protective goggles. Respiratory protection of the dependent type.



Hand protection : Use gloves chemically resistant to this material when prolonged or repeated contact could occur. Gloves should be classified under Standard EN 374 or ASTM F1296. Suggested glove materials are: Natural rubber ("latex"), Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, PVC or vinyl.

Eye protection : Eye protection, including both chemical splash goggles and face shield, must be worn when possibility exists for eye contact due to spraying liquid or airborne particles.

Skin and body protection : Wear suitable protective clothing.

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Respiratory protection : An approved organic vapor respirator/supplied air or self-contained breathing apparatus must be used when vapor concentration exceeds applicable exposure limits.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : Clear
Color : None
Odor : Mild solvent odor
Odor Threshold : No data available
pH : Not applicable
Relative evaporation rate (butyl acetate=1) : No data available
Melting point : No data available
Freezing point : No data available
Boiling point : 184 - 194 °C (363-381 °F)
Flash point : 200 °F Note: Minimum. Method: PMCC
Self ignition temperature : 215 °C (419 °F)
Decomposition temperature : No data available
Flammability (solid, gas) : No data available
Vapor pressure : < 0.5 mm Hg @ 68 °F
Relative vapor density at 20 °C : Heavier than air.
Relative density : No data available
Solubility : No data available
Log Pow : No data available
Log Kow : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidizing properties : No data available
Explosive limits : No data available

9.2. Other information

VOC content : < 15 g/l

*When determining VOC content in accordance with the requirements set forth by the Ozone Transport Commission (OTC), effective 01-01-2009

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

Sparks. Heat. Open flame.

10.5. Incompatible materials

Avoid contact with : Oxidizing agent.

10.6. Hazardous decomposition products

Thermal decomposition generates : Carbon oxides (CO, CO₂).

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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Petroleum distillates, hydrotreated light (64742-47-8)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 5000 mg/kg
LC50 inhalation rat	> 5000 mg/m ³ (vapor) (8 hours)

2-(2-butoxyethoxy)ethanol (112-34-5)	
LD50 oral rat	> 4500 mg/kg
LD50 dermal rabbit	> 2500 mg/kg

Surfactant (Proprietary*)	
LD50 oral rat	> 1300 mg/kg
LD50 dermal rabbit	> 2 g/kg

Skin corrosion/irritation : Skin Irritant Category 2

Serious eye damage/irritation : Eye Irritant Category 2

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : May be fatal if swallowed and enters airways.

Symptoms/injuries after inhalation : Inhalation in high concentrations may cause irritation of the mucous membranes. Solvent vapors are hazardous and may cause nausea, sickness and headaches. Aspiration of this material into the lungs may cause chemical pneumonia or death.

Symptoms/injuries after skin contact : Contact may cause irritation. May dry thy skin leading to irritation and dermatitis.

Symptoms/injuries after eye contact : Direct contact with the eyes is likely to be irritating.

Symptoms/injuries after ingestion : Acute ingestion causes CNS depression, oropharyngeal and gastric pain and vomiting.

Chronic symptoms : No data available.

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

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Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 13: Disposal considerations

13.1. Waste treatment methods

- Waste treatment methods : Do not discharge to public wastewater systems without permit of pollution control authorities. No discharge to surface waters is allowed without an NPDES permit.
- Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Do not allow the product to be released into the environment.

SECTION 14: Transport information

- In accordance with DOT
- Transport document description : Cleaning Compound
- Department of Transportation (DOT) Hazard Classes : Not Regulated – Product does not sustain combustion
- Other information : Not regulated in pkg. of less than 119 gal.

Transport by sea

No additional information available

Air transport

No additional information available

In accordance with ADR / RID / IMDG / IATA / ADN

SECTION 15: Regulatory information

15.1. US Federal regulations

Chemsafe SOLVEX Clear Odorless Mastic Remover

All chemical substances in this product are listed in the EPA (Environmental Protection Agency) TSCA (Toxic Substances Control Act) Inventory

SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
-------------------------------------	---------------------------------

Petroleum distillates, hydrotreated light (64742-47-8)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

2-(2-butoxyethoxy)ethanol (112-34-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Surfactant (Proprietary*)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

Petroleum distillates, hydrotreated light (64742-47-8)

Listed on the Canadian DSL (Domestic Substances List) inventory.

2-(2-butoxyethoxy)ethanol (112-34-5)

Listed on the Canadian DSL (Domestic Substances List) inventory.

Surfactant (Proprietary*)

Listed on the Canadian DSL (Domestic Substances List) inventory.

No additional information available

15.2.2. National regulations

Petroleum distillates, hydrotreated light (64742-47-8)

Listed on Inventory of Existing Chemical Substances (IECSC)
Listed on the AICS (the Australian Inventory of Chemical Substances)
Listed on the Japanese ENCS (Existing & New Chemicals Substances) inventory.
Listed on the Korean ECL (Existing Chemical List) inventory.

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Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

2-(2-butoxyethoxy)ethanol (112-34-5)

Listed on Inventory of Existing Chemical Substances (IECSC)
Listed on the AICS (the Australian Inventory of Chemical Substances)
Listed on the Japanese ENCS (Existing & New Chemicals Substances) inventory.
Listed on the Korean ECL (Existing Chemical List) inventory.
Listed on the Philippines CCS (Chemicals & Chemical Substances) inventory.

Surfactant (Proprietary*)

Listed on Inventory of Existing Chemical Substances (IECSC)
Listed on the AICS (the Australian Inventory of Chemical Substances)
Listed on the Japanese ENCS (Existing & New Chemicals Substances) inventory.
Listed on the Korean ECL (Existing Chemical List) inventory.
Listed on the Philippines CCS (Chemicals & Chemical Substances) inventory.

15.3. US State regulations

California Proposition 65

This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm

SECTION 16: Other information

Indication of changes : Revision 1.0 – 20 September 2019 – New SDS Created
Other information : Author. KAD

NFPA health hazard : 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.
NFPA fire hazard : 1 - Must be preheated before ignition can occur. Materials in this degree require considerable preheating, under all ambient temperature condition, before ignition and combustion can occur.
NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating

Health : 1
Flammability : 1
Physical : 0
Personal Protection :

The information in this document is believed to be correct as of the date issued. However, no warranty of merchantability, fitness for any particular purpose, or any other warranty is expressed or is to be implied regarding the accuracy or completeness of this information, the results to be obtained from the use of this product or the hazards related to its use. This information and product are furnished on the condition that the person receiving them shall make his own determination as to the suitability of the product for his particular purpose and on the condition that he assume the risk of his use thereof.

AramSCO Chemsafe Solvex 100 Low Odor Mastic Remover

Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date: 12/02/2019

Supersedes: All previous versions

Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name : AramSCO Chemsafe Solvex 100 Low Odor Mastic Remover
Product form : Mixture

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Mastic adhesive removal

1.3. Details of the supplier of the safety data sheet

AramSCO Inc.
1480 Grandview Avenue
Thorofair, NJ 08086
Toll-free: (800)767-6933
www.senpro.com

1.4. Emergency telephone number

Emergency number : 1-866-359-5661

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Flammable Liquid Category 4	H227
Aspiration Toxicity Category 1	H304
Skin Irritation Category 2	H315
Eye Irritation Category 2	H319
Acute Toxicity - Inhalation Category 4	H332
Specific Target Organ Toxicity (Single Exposure) [Narcotic effects] Category 3	H336

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

H227 - Combustible liquid
H332 - Harmful if inhaled
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H336 - May cause drowsiness and dizziness
H304 - May be fatal if swallowed and enters airways
Precautionary statements (GHS-US) : P210 - Keep away from heat, open flames, sparks. - No smoking
P261 - Avoid breathing vapors
P271 - Use only outdoors or in a well-ventilated area
P264 - Wash hands thoroughly after handling.
P280 - Wear eye protection, protective clothing, protective gloves
P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312 - Call a POISON CENTER or doctor/physician if you feel unwell
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P362 - Take off contaminated clothing and wash before reuse.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P331 - If swallowed, do NOT induce vomiting
P370+P378 - In case of fire: Use dry chemical, foam, CO2 for extinction

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P403+P235 - Store in a well-ventilated place. Keep cool
P405 - Store locked up
P501 - Dispose of contents/container to licensed waste handling facility

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%
Petroleum distillates, hydrotreated light	(CAS No) 64742-47-8	Proprietary*
2-(2-butoxyethoxy)ethanol	(CAS No) 112-34-5	Proprietary*
Surfactant	(CAS No) Proprietary*	Proprietary*

*The specific chemical identity and exact percentage of composition has been withheld as a trade secret

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
- First-aid measures after skin contact : IF ON SKIN: Immediately rinse with plenty of soap and water (for at least 15 minutes). If skin irritation occurs, get medical advice/attention.
- First-aid measures after eye contact : IF IN EYES: Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes minimum). Remove contact lenses, if present and easy to do so. Continue rinsing. If eye irritation occurs, get medical advice/attention.
- First-aid measures after ingestion : IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries : May be fatal if swallowed and enters airways.
- Symptoms/injuries after inhalation : Inhalation in high concentrations may cause irritation of the mucous membranes. Solvent vapors are hazardous and may cause nausea, sickness and headaches. Aspiration of this material into the lungs may cause chemical pneumonia or death.
- Symptoms/injuries after skin contact : Contact during a long period may cause light irritation.
- Symptoms/injuries after eye contact : Direct contact with the eyes is likely to be irritating.
- Symptoms/injuries after ingestion : Acute ingestion causes CNS depression, oropharyngeal and gastric pain and vomiting.
- Chronic symptoms : No data available.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Dry chemical. Carbon dioxide. Foam.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : This material is an NFPA IIIA combustible liquid.
- Explosion hazard : Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.
- Reactivity : No dangerous reactions known under normal conditions of use.

5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Do not dispose of fire-fighting water in the environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

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Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Evacuate area. Keep upwind. Ventilate area. Spill should be handled by trained clean-up crews properly equipped with respiratory equipment and full chemical protective gear (see Section 8).

6.1.1. For non-emergency personnel

Protective equipment : Wear Protective equipment as described in Section 8.

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Wear suitable protective clothing, gloves and eye or face protection. Approved supplied-air respirator, in case of emergency.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Foam may be used to suppress vapors.

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Place in a suitable container for disposal in accordance with the waste regulations (see Section 13).

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Do not handle until all safety precautions have been read and understood. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Do not breathe mists. Keep away from sources of ignition - No smoking.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Heat sources. Keep container closed when not in use.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Petroleum distillates, hydrotreated light (64742-47-8)	
Remark (ACGIH)	OELs not established
Remark (US OSHA)	OELs not established

2-(2-butoxyethoxy)ethanol (112-34-5)	
Remark (ACGIH)	TWA - 10 ppm
Remark (US OSHA)	OELs not established

Surfactant (Proprietary*)	
Remark (ACGIH)	OELs not established
Remark (US OSHA)	OELs not established

8.2. Exposure controls

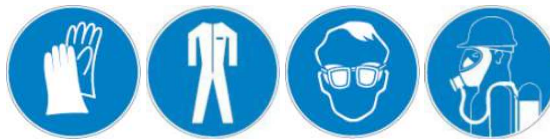
Appropriate engineering controls : Ensure adequate ventilation, especially in confined areas.

AramSCO Chemsafe Solvex 100 Low Odor Mastic Remover

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Personal protective equipment : Gloves. Protective clothing. Protective goggles. Respiratory protection of the dependent type.



Hand protection : Use gloves chemically resistant to this material when prolonged or repeated contact could occur. Gloves should be classified under Standard EN 374 or ASTM F1296. Suggested glove materials are: Natural rubber ("latex"), Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, PVC or vinyl.

Eye protection : Eye protection, including both chemical splash goggles and face shield, must be worn when possibility exists for eye contact due to spraying liquid or airborne particles.

Skin and body protection : Wear suitable protective clothing.

Respiratory protection : An approved organic vapor respirator/supplied air or self-contained breathing apparatus must be used when vapor concentration exceeds applicable exposure limits.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Clear
Color	: Blue
Odor	: Mild solvent odor
Odor Threshold	: No data available
pH	: Not applicable
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: 192 - 212 °C (376-412 °F)
Flash point	: 63 °C (145 °F) Note: Minimum. Method: PMCC
Self ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: < 0.5 mm Hg @ 68 °F
Relative vapor density at 20 °C	: Heavier than air.
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosive limits	: No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

Sparks. Heat. Open flame.

AramSCO Chemsafe Solvex 100 Low Odor Mastic Remover

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Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

10.5. Incompatible materials

Avoid contact with : Oxidizing agent.

10.6. Hazardous decomposition products

Thermal decomposition generates : Carbon oxides (CO, CO₂).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Inhalation Category 4

Petroleum distillates, hydrotreated light (64742-47-8)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 5.2 mg/l/4h

2-(2-butoxyethoxy)ethanol (112-34-5)	
LD50 oral rat	> 4500 mg/kg
LD50 dermal rabbit	> 2500 mg/kg

Surfactant (Proprietary*)	
LD50 oral rat	> 1300 mg/kg
LD50 dermal rabbit	> 2 g/kg

Skin corrosion/irritation : Skin Irritant Category 2

Serious eye damage/irritation : Eye Irritant Category 2

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Inhalation may cause drowsiness and dizziness

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : May be fatal if swallowed and enters airways.

Symptoms/injuries after inhalation : Inhalation in high concentrations may cause irritation of the mucous membranes. Solvent vapors are hazardous and may cause nausea, sickness and headaches. Aspiration of this material into the lungs may cause chemical pneumonia or death.

Symptoms/injuries after skin contact : Contact may cause irritation.

Symptoms/injuries after eye contact : Direct contact with the eyes is likely to be irritating.

Symptoms/injuries after ingestion : Acute ingestion causes CNS depression, oropharyngeal and gastric pain and vomiting.

Chronic symptoms : No data available.

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

AramSCO Chemsafe Solvex 100 Low Odor Mastic Remover

Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Do not discharge to public wastewater systems without permit of pollution control authorities. No discharge to surface waters is allowed without an NPDES permit.

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Do not allow the product to be released into the environment.

SECTION 14: Transport information

In accordance with DOT

Transport document description : Cleaning Compound

Department of Transportation (DOT) Hazard Classes : Not Regulated – Product does not sustain combustion

Other information : Not regulated in pkg. of less than 119 gal.

Transport by sea

No additional information available

Air transport

No additional information available

In accordance with ADR / RID / IMDG / IATA / ADN

SECTION 15: Regulatory information

15.1. US Federal regulations

AramSCO Chemsafe Solvex 100 Low Odor Mastic Remover

All chemical substances in this product are listed in the EPA (Environmental Protection Agency) TSCA (Toxic Substances Control Act) Inventory

SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Fire hazard
-------------------------------------	--

Petroleum distillates, hydrotreated light (64742-47-8)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

2-(2-butoxyethoxy)ethanol (112-34-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Surfactant (Proprietary*)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

Petroleum distillates, hydrotreated light (64742-47-8)

Listed on the Canadian DSL (Domestic Substances List) inventory.

2-(2-butoxyethoxy)ethanol (112-34-5)

Listed on the Canadian DSL (Domestic Substances List) inventory.

Surfactant (Proprietary*)

Listed on the Canadian DSL (Domestic Substances List) inventory.

No additional information available

15.2.2. National regulations

Petroleum distillates, hydrotreated light (64742-47-8)

Listed on Inventory of Existing Chemical Substances (IECSC)
Listed on the AICS (the Australian Inventory of Chemical Substances)
Listed on the Japanese ENCS (Existing & New Chemicals Substances) inventory.
Listed on the Korean ECL (Existing Chemical List) inventory.

AramSCO Chemsafe Solvex 100 Low Odor Mastic Remover

Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

2-(2-butoxyethoxy)ethanol (112-34-5)

Listed on Inventory of Existing Chemical Substances (IECSC)
Listed on the AICS (the Australian Inventory of Chemical Substances)
Listed on the Japanese ENCS (Existing & New Chemicals Substances) inventory.
Listed on the Korean ECL (Existing Chemical List) inventory.
Listed on the Philippines CCS (Chemicals & Chemical Substances) inventory.

Surfactant (Proprietary*)

Listed on Inventory of Existing Chemical Substances (IECSC)
Listed on the AICS (the Australian Inventory of Chemical Substances)
Listed on the Japanese ENCS (Existing & New Chemicals Substances) inventory.
Listed on the Korean ECL (Existing Chemical List) inventory.
Listed on the Philippines CCS (Chemicals & Chemical Substances) inventory.

15.3. US State regulations

California Proposition 65

This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm

SECTION 16: Other information

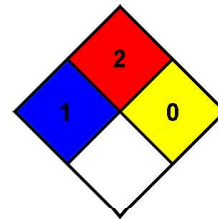
Indication of changes : Revision 1.0 – 2 December 2019 - New SDS Created

Other information : Author. KAD

NFPA health hazard : 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

NFPA fire hazard : 2 - Must be moderately heated or exposed to relatively high temperature before ignition can occur.

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating

Health : 1

Flammability : 2

Physical : 0

Personal Protection :

The information in this document is believed to be correct as of the date issued. However, no warranty of merchantability, fitness for any particular purpose, or any other warranty is expressed or is to be implied regarding the accuracy or completeness of this information, the results to be obtained from the use of this product or the hazards related to its use. This information and product are furnished on the condition that the person receiving them shall make his own determination as to the suitability of the product for his particular purpose and on the condition that he assume the risk of his use thereof.

P312 Call a poison center/doctor if you feel unwell.
P305 + P351 + P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 If eye irritation persists: Get medical advice/attention.

Storage

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

Disposal

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Petroleum Distillates, Hydrotreated Light		64742-47-8	70-90
2-(2-Butoxyethoxy) Ethanol		112-34-5	10-30
Non-hazardous components.			0.1-10

4. First-aid measures

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin contact

Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion

Rinse mouth. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical advice/attention if you feel unwell.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

5. Fire-fighting measures

Suitable extinguishing media

Alcohol resistant foam. Powder. Dry chemicals. Carbon dioxide (CO₂).

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions

Cool containers exposed to heat with water spray and remove container, if no risk is involved.

Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards

Combustible. No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Use water spray to reduce vapors or divert vapor cloud drift. This product is miscible in water.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Do not taste or swallow. Avoid breathing mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated contact with skin. Avoid prolonged exposure. When using, do not eat, drink or smoke. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store locked up. Keep away from heat and sources of ignition. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
2-(2-Butoxyethoxy) Ethanol (CAS 112-34-5)	TWA	10 ppm	Inhalable fraction and vapor.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Petroleum Distillates, Hydrotreated Light (CAS 64742-47-8)	TWA	100 mg/m3

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection

Face shield is recommended. Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection

Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

Other

Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment. Chemical respirator with organic vapor cartridge.

General hygiene considerations

Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Clear.

Physical state

Liquid.

Form

Liquid.

Color

Colorless.

Odor

Typical Solvent.

pH

Not available.

Melting point/freezing point	Not determined
Initial boiling point and boiling range	429.8 °F (221 °C) estimated
Flash point	204.8 °F (96.0 °C) Lowest Flashing component
Evaporation rate	< 1 (BuAc = 1)
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	0.6 % estimated
Flammability limit - upper (%)	24.6 % estimated
Vapor pressure	0.14 hPa @ 20 Deg. C (1 hPa = 0.75006 mmHg)
Vapor density	> 1 (Air = 1)
Solubility(ies)	
Solubility (water)	Emulsifiable.
Auto-ignition temperature	Not determined
Other information	
Pounds per gallon	6.966 lb/gal
Specific gravity	0.836
Relative volatility	95 % (approx)

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport
Chemical stability	Material is stable under normal conditions. Stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Suitable precautions should be utilized if using this product at temperatures above the flash point. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause drowsiness and dizziness. Headache. Nausea, vomiting. Prolonged inhalation may be harmful.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye irritation.
Ingestion	Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.

Information on toxicological effects

Acute toxicity In high concentrations, vapors are anesthetic and may cause headache, fatigue, dizziness and central nervous system effects. Harmful if swallowed. Narcotic effects.

Components	Species	Test Results
2-(2-Butoxyethoxy) Ethanol (CAS 112-34-5)		
Acute Dermal		
LD50	Rabbit	2700 mg/kg

Components	Species	Test Results
Oral		
LD50	Guinea pig	2000 mg/kg
	Mouse	2400 mg/kg
	Rabbit	2200 mg/kg
	Rat	4500 mg/kg

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye irritation Causes serious eye irritation.

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects

Specific target organ toxicity - single exposure May cause drowsiness and dizziness.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Not an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
2-(2-Butoxyethoxy) Ethanol (CAS 112-34-5)		
Aquatic		
Fish	LC50	Bluegill (Lepomis macrochirus)
		1300 mg/l, 96 hours
Petroleum Distillates, Hydrotreated Light (CAS 64742-47-8)		
Aquatic		
Fish	LC50	Rainbow trout, donaldson trout (Oncorhynchus mykiss)
		2.9 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

2-(2-Butoxyethoxy) Ethanol 0.5, Estimated.
1

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT NON-BULK #61 @? . .
Not DOT regulated material.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard 29 CFR 1910.1200.

CERCLA Hazardous Substance List (40 CFR 302.4)

2-(2-Butoxyethoxy) Ethanol (CAS 112-34-5) Listed.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Yes

Hazardous chemical

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
2-(2-Butoxyethoxy) Ethanol	112-34-5	10-30

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

2-(2-Butoxyethoxy) Ethanol (CAS 112-34-5)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations

US - New Jersey RTK - Substances: Listed substance

2-(2-Butoxyethoxy) Ethanol (CAS 112-34-5)

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

2-(2-Butoxyethoxy) Ethanol (CAS 112-34-5)
Petroleum Distillates, Hydrotreated Light (CAS 64742-47-8)

US. Massachusetts RTK - Substance List

Petroleum Distillates, Hydrotreated Light (CAS 64742-47-8)

US. New Jersey Worker and Community Right-to-Know Act

2-(2-Butoxyethoxy) Ethanol (CAS 112-34-5)
Petroleum Distillates, Hydrotreated Light (CAS 64742-47-8)

US. Pennsylvania RTK - Hazardous Substances

2-(2-Butoxyethoxy) Ethanol (CAS 112-34-5)
 Petroleum Distillates, Hydrotreated Light (CAS 64742-47-8)

US. Pennsylvania Worker and Community Right-to-Know Law

2-(2-Butoxyethoxy) Ethanol (CAS 112-34-5)
 Petroleum Distillates, Hydrotreated Light (CAS 64742-47-8)

US. Rhode Island RTK

2-(2-Butoxyethoxy) Ethanol (CAS 112-34-5)

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 11-13-2014

Revision date 09-27-2016

Version # 02

Disclaimer Superior Oil Company, Inc. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. This information is based on data available to us and is accurate and reliable to the best of our knowledge at the time of printing. However, no warranty is expressed or implied regarding the accuracy or completeness of the information contained herein. Final determination of the suitability of this material for the use contemplated is the sole responsibility of the user. Buyer assumes all risk and liabilities. Buyer accepts and uses this material on these conditions.

Revision information This document has undergone significant changes and should be reviewed in its entirety.



1. Identification

Product identifier **Attack!® Low Odor**

Other means of identification

Product code 0302673 **Sold as Item #S-8336**

Recommended use Solvent

Recommended restrictions None known.

Manufacturer Quest Safety Products Inc.
1414 S. West Street, Suite #200
Indianapolis, IN 46225
US
Information (800) 878-4872
Emergency (317) 781-4400

2. Hazard(s) identification

Physical hazards Flammable liquids Category 4

Health hazards Acute toxicity, oral Category 4
Acute toxicity, dermal Category 3

Environmental hazards Hazardous to the aquatic environment, acute hazard Category 2
Hazardous to the aquatic environment, long-term hazard Category 2

OSHA defined hazards Not classified.

Label elements



Signal word Danger

Hazard statement

H227 Combustible liquid.
H303 Cause skin and eyes irritation.
H302 Harmful if swallowed.
H311 Toxic in contact with skin.
H401 Toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects.

Prevention

P262 - Avoid eyes contact.
P262 - Avoid prolonged skin contact.
P260 - Avoid breathing vapors or mist
P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P264 - Wash hands thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P273 - Avoid release to the environment.
P280 - Wear protective gloves/protective clothing.
P280 - Wear protective gloves/eye protection/face protection.

Response

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P302 + P350 - IF ON SKIN: Wash with plenty of water.
P361 + P364 - Take off immediately all contaminated clothing and wash it before reuse.
P301 + P312 - If swallowed: Call a poison center/doctor if you feel unwell.
P370 + P378 - In case of fire: Use appropriate media to extinguish.
P391 - Collect spillage.

Storage

P403 + P235 - Store in a well-ventilated place. Keep cool.

Disposal

P501 - Dispose of contents/container in accordance with local/regional/national/international regulations.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Petroleum Distillates, Hydrotreated Light		64742-47-8	90-100
2-Butoxyethanol		111-76-2	0.1-10
Non-hazardous and other components below reportable levels			0.1-10

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	If overexposure to vapors or mist, move to fresh air. Call a physician if breathing becomes difficult.
Skin contact	Take off immediately all contaminated clothing. Wash off with soap and plenty of water. Call a POISON CENTER or doctor/physician if you feel unwell. Get medical attention if irritation develops and persists.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
General information	Take off immediately all contaminated clothing. In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media	Alcohol resistant foam. Water fog. Dry chemical powder. Dry chemicals. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	The product is combustible, and heating may generate vapors which may form explosive vapor/air mixtures. During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting equipment/instructions	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk. Cool containers exposed to heat with water spray and remove container, if no risk is involved.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	Combustible liquid.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Immediately evacuate personnel to safe areas. Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. This product is miscible in water. Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Use water spray to reduce vapors or divert vapor cloud drift. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage**Precautions for safe handling**

Keep away from open flames, hot surfaces and sources of ignition. Do not get this material in contact with skin. Do not taste or swallow. Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Avoid prolonged exposure. Avoid contact with clothing. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Wash contaminated clothing before reuse. Avoid release to the environment. Do not empty into drains.

Conditions for safe storage, including any incompatibilities

Keep away from heat and sources of ignition. Store in original tightly closed container. Store in a cool, dry place out of direct sunlight. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Keep in an area equipped with sprinklers.

8. Exposure controls/personal protection**Occupational exposure limits****U.S. - OSHA****Components**

Components	Type	Value	Form
Petroleum Distillates, Hydrotreated Light (CAS 64742-47-8)	TWA	500 ppm	Vapor

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**Components**

Components	Type	Value
2-Butoxyethanol (CAS 111-76-2)	PEL	240 mg/m ³ 50 ppm

ACGIH**Components**

Components	Type	Value	Form
Petroleum Distillates, Hydrotreated Light (CAS 64742-47-8)	TWA	100 ppm	Vapor

US. ACGIH Threshold Limit Values**Components**

Components	Type	Value
2-Butoxyethanol (CAS 111-76-2)	TWA	20 ppm

US. NIOSH: Pocket Guide to Chemical Hazards**Components**

Components	Type	Value
2-Butoxyethanol (CAS 111-76-2)	TWA	24 mg/m ³ 5 ppm

Biological limit values**ACGIH Biological Exposure Indices**

Components	Value	Determinant	Specimen	Sampling Time
2-Butoxyethanol (CAS 111-76-2)	200 mg/g	Butoxyacetic acid (BAA), with hydrolysis	Creatinine in urine	*

* - For sampling details, please see the source document.

Exposure guidelines**US - California OELs: Skin designation**

2-Butoxyethanol (CAS 111-76-2) Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

2-Butoxyethanol (CAS 111-76-2) Skin designation applies.

US - Tennessee OELs: Skin designation

2-Butoxyethanol (CAS 111-76-2) Can be absorbed through the skin.

US NIOSH Pocket Guide to Chemical Hazards: Skin designation

2-Butoxyethanol (CAS 111-76-2) Can be absorbed through the skin.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

2-Butoxyethanol (CAS 111-76-2) Can be absorbed through the skin.

Appropriate engineering controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear eye/face protection. Wear safety glasses with side shields (or goggles).

Hand protection Wear protective gloves.

Skin protection

Other Wear appropriate chemical resistant clothing.

Respiratory protection If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

General hygiene considerations When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance Clear.

Physical state Liquid.

Form Liquid.

Color Colorless.

Odor Typical Solvent.

Odor threshold Not available.

pH Not available.

Melting point/freezing point N.D. estimated

Initial boiling point and boiling range 336.2 °F (169 °C) estimated

Flash point 142.0 °F (61.1 °C) (Lowest flashing component) estimated

Evaporation rate < 1 (Butyl Acetate = 1)

Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) 0.8 % estimated

Flammability limit - upper (%) 10.6 % estimated

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure 0.69 hPa 1 hPa = 0.75006 mmHg estimated

Vapor pressure temp. @ 20 Deg. C

Vapor density > 1 (Air = 1)

Relative density Not available.

Solubility(ies)

Solubility (water) Emulsifiable.

Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature N.D. estimated

Decomposition temperature Not available.

Viscosity Not available.

Other information

Percent volatile 97.07 % estimated

Pounds per gallon 6.77 lb/gal

Specific gravity 0.81

VOC (Weight %) 97.07 % estimated

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	No hazardous reaction known under normal conditions of use.
Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources. Suitable precautions should be utilized if using this product at temperatures above the flash point. Contact with incompatible materials.
Incompatible materials	Strong oxidizers and strong acids.
Hazardous decomposition products	No hazardous decomposition products are known if stored and applied as directed.

11. Toxicological information

Information on likely routes of exposure

Ingestion	Harmful if swallowed.
Inhalation	Prolonged inhalation may be harmful.
Skin contact	Toxic in contact with skin.

2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged. These effects have not been observed in humans.

Eye contact Direct contact with eyes may cause temporary irritation.

Symptoms related to the physical, chemical and toxicological characteristics Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity Toxic in contact with skin. Harmful if swallowed. Expected to be a low hazard for usual industrial or commercial handling by trained personnel.

Components	Species	Test Results
2-Butoxyethanol (CAS 111-76-2)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	400 mg/kg
<i>Inhalation</i>		
LC50	Mouse	700 ppm, 7 Hours
	Rat	450 ppm, 4 Hours
<i>Oral</i>		
LD50	Guinea pig	1.2 g/kg
	Mouse	1.2 g/kg
	Rabbit	0.32 g/kg
	Rat	560 mg/kg
<i>Other</i>		
LD50	Mouse	1130 mg/kg
	Rabbit	280 mg/kg
	Rat	340 mg/kg

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye irritation Direct contact with eyes may cause temporary irritation.

Respiratory or skin sensitization

Respiratory sensitization Not available.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

2-Butoxyethanol (CAS 111-76-2)

3 Not classifiable as to carcinogenicity to humans.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure	Not classified.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Not available.
Chronic effects	Prolonged inhalation may be harmful. May be harmful if absorbed through skin. 2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged. These effects have not been observed in humans.

12. Ecological information

Ecotoxicity Toxic to aquatic life with long lasting effects. Accumulation in aquatic organisms is expected.

Components	Species	Test Results
2-Butoxyethanol (CAS 111-76-2)		
Aquatic		
Fish	LC50 Inland silverside (Menidia beryllina)	1250 mg/l, 96 hours
Petroleum Distillates, Hydrotreated Light (CAS 64742-47-8)		
Aquatic		
Fish	LC50 Rainbow trout,donaldson trout (Oncorhynchus mykiss)	2.9 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available.

Partition coefficient n-octanol / water (log Kow)

2-Butoxyethanol 0.83

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT BULK

UN number	NA1993
Proper shipping name	Compounds, Cleaning Liquid (Petroleum Distillates, Ethylene Glycol Monobutyl Ether)
Hazard class	Combustible Liquid
Packing group	III
ERG code	128

DOT NON-BULK

Not regulated as dangerous goods.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

CERCLA Hazardous Substance List (40 CFR 302.4)

2-Butoxyethanol (CAS 111-76-2) Listed.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Yes

Hazardous chemical

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
2-Butoxyethanol	111-76-2	0.1-10
Ethylene Glycol	107-21-1	0.1-10

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations

US. Massachusetts RTK - Substance List

2-Butoxyethanol (CAS 111-76-2)

US. New Jersey Worker and Community Right-to-Know Act

2-Butoxyethanol (CAS 111-76-2) 500 LBS

US. Pennsylvania RTK - Hazardous Substances

2-Butoxyethanol (CAS 111-76-2)

US. Rhode Island RTK

2-Butoxyethanol (CAS 111-76-2)

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 11-05-2014

Version # 01

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Revision Information Composition / Information on Ingredients: Disclosure Overrides
Physical & Chemical Properties: Multiple Properties
Transport Information: Material Transportation Information
Regulatory Information: United States



Safety Data Sheet

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SECTION 1: Identification

1.1. Product identifier

3M(TM) Fire Block Foam FB-Foam

Product Identification Numbers

98-0400-5614-9, 98-0400-5632-1, 98-0441-1020-7
7100006734, 7010401353

1.2. Recommended use and restrictions on use

Recommended use

Sealant

1.3. Supplier's details

MANUFACTURER:	3M
DIVISION:	Industrial Adhesives and Tapes Division
ADDRESS:	3M Center, St. Paul, MN 55144-1000, USA
Telephone:	1-888-3M HELPS (1-888-364-3577)

1.4. Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

SECTION 2: Hazard identification

2.1. Hazard classification

Flammable Aerosol: Category 1.
Gas Under Pressure: Liquefied gas.
Acute Toxicity (inhalation): Category 4.
Serious Eye Damage/Irritation: Category 2A.
Skin Corrosion/Irritation: Category 2.
Respiratory Sensitizer: Category 1.
Skin Sensitizer: Category 1.
Reproductive Toxicity: Lactation.
Simple Asphyxiant.
Specific Target Organ Toxicity (single exposure): Category 1.
Specific Target Organ Toxicity (single exposure): Category 3.
Specific Target Organ Toxicity (repeated exposure): Category 1.

2.2. Label elements

Signal word

Danger

Symbols

Flame | Gas cylinder | Exclamation mark | Health Hazard |

Pictograms



Hazard Statements

Extremely flammable aerosol.

Contains gas under pressure; may explode if heated.

Causes serious eye irritation.

Causes skin irritation.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

Harmful if inhaled.

May cause drowsiness or dizziness.

May cause harm to breast-fed children.

May displace oxygen and cause rapid suffocation.

Causes damage to organs:

cardiovascular system |

Causes damage to organs through prolonged or repeated exposure:

respiratory system |

Precautionary Statements

General:

Keep out of reach of children.

Prevention:

Obtain special instructions before use.

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Do not spray on an open flame or other ignition source.

Pressurized container: Do not pierce or burn, even after use.

Do not breathe dust/fume/gas/mist/vapors/spray.

Avoid contact during pregnancy/while nursing.

Use only outdoors or in a well-ventilated area.

In case of inadequate ventilation wear respiratory protection.

Wear protective gloves and eye/face protection.

Do not eat, drink or smoke when using this product.

Wash thoroughly after handling.

Contaminated work clothing must not be allowed out of the workplace.

Response:

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

IF ON SKIN: Wash with plenty of soap and water.

If skin irritation or rash occurs: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

IF exposed or concerned: Get medical advice/attention.

Specific treatment (see Notes to Physician on this label).

Storage:

Protect from sunlight. Do not expose to temperatures exceeding 50C/122F.

Keep container tightly closed.

Store locked up in a well-ventilated place.

Disposal:

Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

Notes to Physician:

Exposure may increase myocardial irritability. Do not administer sympathomimetic drugs unless absolutely necessary.

Supplemental Information:

Persons previously sensitized to isocyanates may develop a cross-sensitization reaction to other isocyanates. Intentional concentration and inhalation may be harmful or fatal.

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
Polyol Blend (NJTS Reg. No. 04499600-7192)	Trade Secret*	40 - 70 Trade Secret *
Alkanes, C14-C17, Chloro	85535-85-9	10 - 30 Trade Secret *
Dimethyl Ether	115-10-6	5 - 10 Trade Secret *
Isobutane	75-28-5	5 - 10 Trade Secret *
4,4' Diphenylmethane diisocyanate (MDI)	101-68-8	3 - 7 Trade Secret *
Higher Oligomers of MDI (pMDI)	9016-87-9	3 - 7 Trade Secret *
Propane	74-98-6	1 - 5 Trade Secret *

NJTS or NJTSRN: New Jersey Trade Secret Registry Number.

*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:

Remove person to fresh air. Get medical attention.

Skin Contact:

Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

Eye Contact:

Immediately flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. Get medical attention.

If Swallowed:

Rinse mouth. If you feel unwell, get medical attention.

4.2. Most important symptoms and effects, both acute and delayed

See Section 11.1. Information on toxicological effects.

4.3. Indication of any immediate medical attention and special treatment required

Exposure may increase myocardial irritability. Do not administer sympathomimetic drugs unless absolutely necessary.

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

Use a fire fighting agent suitable for the surrounding fire.

5.2. Special hazards arising from the substance or mixture

Closed containers exposed to heat from fire may build pressure and explode.

Hazardous Decomposition or By-Products

Substance

Formaldehyde
Carbon monoxide
Carbon dioxide
Hydrogen Chloride
Hydrogen Cyanide
Oxides of Nitrogen

Condition

During Combustion
During Combustion
During Combustion
During Combustion
During Combustion
During Combustion

5.3. Special protective actions for fire-fighters

Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Ventilate the area with fresh air. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions

For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water.

6.3. Methods and material for containment and cleaning up

Contain spill. Cover spill area with a fire-extinguishing foam. An appropriate aqueous film forming foam (AFFF) is recommended. Pour isocyanate decontaminant solution (90% water, 8% concentrated ammonia, 2% detergent) on spill and allow to react for 10 minutes. Or pour water on spill and allow to react for more than 30 minutes. Cover with absorbent material. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible using non-sparking tools. Place in a container approved for transportation by appropriate authorities, but do not seal the container for 48 hours to avoid pressure build-up. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and SDS. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Do not use in a confined area with minimal air exchange. Keep out of reach of children. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Avoid contact during pregnancy/while nursing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.)

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep container tightly closed. Protect from sunlight. Do not expose to temperatures exceeding 50C/122F. Store away from heat. Store away from acids. Store away from strong bases. Store away from oxidizing agents. Store away from amines.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
4,4' Diphenylmethane diisocyanate (MDI)	101-68-8	ACGIH	TWA:0.005 ppm	
4,4' Diphenylmethane diisocyanate (MDI)	101-68-8	OSHA	CEIL:0.2 mg/m3(0.02 ppm)	
Dimethyl Ether	115-10-6	AIHA	TWA:1880 mg/m3(1000 ppm)	
Propane	74-98-6	ACGIH	Limit value not established:	simple asphyxiant
Propane	74-98-6	OSHA	TWA:1800 mg/m3(1000 ppm)	
Isobutane	75-28-5	ACGIH	STEL:1000 ppm	
Natural gas	75-28-5	ACGIH	Limit value not established:	simple asphyxiant

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

OSHA : United States Department of Labor - Occupational Safety and Health Administration

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls

Do not remain in area where available oxygen may be reduced. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Full Face Shield

Indirect Vented Goggles

Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity.

Gloves made from the following material(s) are recommended: Fluoroelastomer

Polymer laminate

If this product is used in a manner that presents a higher potential for exposure (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an exposure assessment. The following protective clothing material(s) are recommended: Apron - polymer laminate

Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapors and particulates

Half facepiece or full facepiece supplied-air respirator

For questions about suitability for a specific application, consult with your respirator manufacturer.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties****Appearance****Physical state**

Liquid

Color

Off-White, Yellow

Odor

Slight Hydrocarbon

Odor threshold*No Data Available***pH***No Data Available***Melting point***No Data Available***Boiling Point**

-33.3 - -11.7 °C [*Details*:Liquefied petroleum gas (hydrocarbon, HC) components boil between -33.3 to -11.7C. Other components boil at temperatures greater than 93.3C]

Flash Point-156 °F [*Test Method*:Estimated]**Evaporation rate***No Data Available***Flammability (solid, gas)**

Not Applicable

Flammable Limits(LEL)*No Data Available***Flammable Limits(UEL)***No Data Available***Vapor Pressure**

>=345 kPa [*Details*:Contents under pressure have vapor pressure greater than 345kPa. After release from container, the pressure is very low.]

Vapor Density*Not Applicable***Density**

1.1 g/ml

Specific Gravity1.1 [*Ref Std*:WATER=1]**Solubility in Water**Nil [*Details*:Reacts slowly with water during cure]**Solubility- non-water***No Data Available***Partition coefficient: n-octanol/ water***No Data Available***Autoignition temperature***No Data Available***Decomposition temperature***No Data Available***Viscosity***No Data Available***VOC Less H2O & Exempt Solvents**

165 g/l

SECTION 10: Stability and reactivity

10.1. Reactivity

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section.

10.2. Chemical stability

Stable. Do not store above 50C

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Heat

10.5. Incompatible materials

Alcohols
Strong bases
Amines
Strong oxidizing agents

10.6. Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
None known.	

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation:

Harmful if inhaled. Simple Asphyxiation: Signs/symptoms may include increased heart rate, rapid respirations, drowsiness, headache, incoordination, altered judgement, nausea, vomiting, lethargy, seizures, coma, and may be fatal.

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Allergic Respiratory Reaction: Signs/symptoms may include difficulty breathing, wheezing, cough, and tightness of chest.

May cause additional health effects (see below).

Skin Contact:

Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, dryness, cracking, blistering, and pain.
Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

Eye Contact:

Severe Eye Irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

Ingestion:

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

May cause additional health effects (see below).

Additional Health Effects:**Single exposure may cause target organ effects:**

Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

Single exposure, above recommended guidelines, may cause:

Cardiac Sensitization: Signs/symptoms may include irregular heartbeat (arrhythmia), faintness, chest pain, and may be fatal.

Prolonged or repeated exposure may cause target organ effects:

Respiratory Effects: Signs/symptoms may include cough, shortness of breath, chest tightness, wheezing, increased heart rate, bluish colored skin (cyanosis), sputum production, changes in lung function tests, and/or respiratory failure.

Reproductive/Developmental Toxicity:

Contains a chemical or chemicals which may interfere with lactation or be harmful to breastfed children.

Additional Information:

Persons previously sensitized to isocyanates may develop a cross-sensitization reaction to other isocyanates.

Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

Name	Route	Species	Value
Overall product	Inhalation-Dust/Mist(4 hr)		No data available; calculated ATE1 - 5 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Alkanes, C14-C17, Chloro	Dermal		estimated to be > 5,000 mg/kg
Alkanes, C14-C17, Chloro	Inhalation-Dust/Mist		estimated to be > 12.5 mg/l
Alkanes, C14-C17, Chloro	Inhalation-Vapor		estimated to be > 50 mg/l
Alkanes, C14-C17, Chloro	Ingestion		estimated to be > 5,000 mg/kg
Isobutane	Inhalation-Gas (4 hours)	Rat	LC50 276,000 ppm
Dimethyl Ether	Inhalation-Gas (4 hours)	Rat	LC50 164,000 ppm
Propane	Inhalation-Gas (4 hours)	Rat	LC50 > 200,000 ppm

4,4' Diphenylmethane diisocyanate (MDI)	Dermal	Rabbit	LD50 > 5,000 mg/kg
Higher Oligomers of MDI (pMDI)	Dermal	Rabbit	LD50 > 5,000 mg/kg
4,4' Diphenylmethane diisocyanate (MDI)	Inhalation-Dust/Mist (4 hours)	Rat	LC50 0.368 mg/l
4,4' Diphenylmethane diisocyanate (MDI)	Ingestion	Rat	LD50 31,600 mg/kg
Higher Oligomers of MDI (pMDI)	Inhalation-Dust/Mist (4 hours)	Rat	LC50 0.368 mg/l
Higher Oligomers of MDI (pMDI)	Ingestion	Rat	LD50 31,600 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Isobutane	Professional judgement	No significant irritation
Propane	Rabbit	Minimal irritation
4,4' Diphenylmethane diisocyanate (MDI)	official classification	Irritant
Higher Oligomers of MDI (pMDI)	official classification	Irritant

Serious Eye Damage/Irritation

Name	Species	Value
Isobutane	Professional judgement	No significant irritation
Propane	Rabbit	Mild irritant
4,4' Diphenylmethane diisocyanate (MDI)	official classification	Severe irritant
Higher Oligomers of MDI (pMDI)	official classification	Severe irritant

Skin Sensitization

Name	Species	Value
4,4' Diphenylmethane diisocyanate (MDI)	official classification	Sensitizing
Higher Oligomers of MDI (pMDI)	official classification	Sensitizing

Respiratory Sensitization

Name	Species	Value
4,4' Diphenylmethane diisocyanate (MDI)	Human	Sensitizing
Higher Oligomers of MDI (pMDI)	Human	Sensitizing

Germ Cell Mutagenicity

Name	Route	Value
Isobutane	In Vitro	Not mutagenic
Dimethyl Ether	In Vitro	Not mutagenic
Dimethyl Ether	In vivo	Not mutagenic

Propane	In Vitro	Not mutagenic
4,4' Diphenylmethane diisocyanate (MDI)	In Vitro	Some positive data exist, but the data are not sufficient for classification
Higher Oligomers of MDI (pMDI)	In Vitro	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
Dimethyl Ether	Inhalation	Rat	Not carcinogenic
4,4' Diphenylmethane diisocyanate (MDI)	Inhalation	Rat	Some positive data exist, but the data are not sufficient for classification
Higher Oligomers of MDI (pMDI)	Inhalation	Rat	Some positive data exist, but the data are not sufficient for classification

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
Dimethyl Ether	Inhalation	Not classified for development	Rat	NOAEL 40,000 ppm	during organogenesis
4,4' Diphenylmethane diisocyanate (MDI)	Inhalation	Not classified for development	Rat	NOAEL 0.004 mg/l	during organogenesis
Higher Oligomers of MDI (pMDI)	Inhalation	Not classified for development	Rat	NOAEL 0.004 mg/l	during organogenesis

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Isobutane	Inhalation	cardiac sensitization	Causes damage to organs	Multiple animal species	NOAEL Not available	
Isobutane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Isobutane	Inhalation	respiratory irritation	Not classified	Mouse	NOAEL Not available	
Dimethyl Ether	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Rat	LOAEL 10,000 ppm	30 minutes
Dimethyl Ether	Inhalation	cardiac sensitization	Some positive data exist, but the data are not sufficient for classification	Dog	NOAEL 100,000 ppm	5 minutes
Propane	Inhalation	cardiac sensitization	Causes damage to organs	Human	NOAEL Not available	
Propane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Propane	Inhalation	respiratory irritation	Not classified	Human	NOAEL Not available	
4,4' Diphenylmethane diisocyanate (MDI)	Inhalation	respiratory irritation	May cause respiratory irritation	official classification	NOAEL Not available	
Higher Oligomers of MDI (pMDI)	Inhalation	respiratory irritation	May cause respiratory irritation	official classification	NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Isobutane	Inhalation	kidney and/or	Not classified	Rat	NOAEL	13 weeks

		bladder			4,500 ppm	
Dimethyl Ether	Inhalation	hematopoietic system	Not classified	Rat	NOAEL 25,000 ppm	2 years
Dimethyl Ether	Inhalation	liver	Not classified	Rat	NOAEL 20,000 ppm	30 weeks
4,4' Diphenylmethane diisocyanate (MDI)	Inhalation	respiratory system	Causes damage to organs through prolonged or repeated exposure	Rat	LOAEL 0.004 mg/l	13 weeks
Higher Oligomers of MDI (pMDI)	Inhalation	respiratory system	Causes damage to organs through prolonged or repeated exposure	Rat	LOAEL 0.004 mg/l	13 weeks

Aspiration Hazard

For the component/components, either no data are currently available or the data are not sufficient for classification.

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

SECTION 12: Ecological information**Ecotoxicological information**

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

Chemical fate information

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

SECTION 13: Disposal considerations**13.1. Disposal methods**

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. Facility must be capable of handling aerosol cans. Combustion products will include halogen acid (HCl/HF/HBr). Facility must be capable of handling halogenated materials. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

EPA Hazardous Waste Number (RCRA): D001 (Ignitable)

SECTION 14: Transport Information

For Transport Information, please visit <http://3M.com/Transportinfo> or call 1-800-364-3577 or 651-737-6501.

SECTION 15: Regulatory information**15.1. US Federal Regulations**

Contact 3M for more information.

EPCRA 311/312 Hazard Classifications:**Physical Hazards**

Flammable (gases, aerosols, liquids, or solids)
 Gas under pressure

Health Hazards
Acute toxicity
Reproductive toxicity
Respiratory or Skin Sensitization
Serious eye damage or eye irritation
Simple Asphyxiant
Skin Corrosion or Irritation
Specific target organ toxicity (single or repeated exposure)

Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):

<u>Ingredient</u>	<u>C.A.S. No</u>	<u>% by Wt</u>
4,4' Diphenylmethane diisocyanate (MDI)	101-68-8	Trade Secret 3 - 7
4,4' Diphenylmethane diisocyanate (MDI) (Benzene, 1,1'-methylenebis[4-isocyanato-)	101-68-8	3 - 7
4,4' Diphenylmethane diisocyanate (MDI) (DIISOCYANATES (CERTAIN CHEMICALS ONLY))	101-68-8	3 - 7
Higher Oligomers of MDI (pMDI)	9016-87-9	Trade Secret 3 - 7
Higher Oligomers of MDI (pMDI) (DIISOCYANATES (CERTAIN CHEMICALS ONLY))	9016-87-9	3 - 7

This material contains a chemical which requires export notification under TSCA Section 12[b]:

<u>Ingredient (Category if applicable)</u>	<u>C.A.S. No</u>	<u>Regulation</u>	<u>Status</u>
Alkanes, C14-C17, Chloro	85535-85-9	Toxic Substances Control Act (TSCA) 5 SNUR or Consent Order Chemicals	Applicable

This material contains a chemical subject to a proposed EPA Significant New Use Rule (TSCA Section 5)

<u>Ingredient (Category if applicable)</u>	<u>C.A.S. No</u>	<u>Reference</u>
Alkanes, C14-C17, Chloro	85535-85-9	40 CFR 721.11076

15.2. State Regulations

Contact 3M for more information.

15.3. Chemical Inventories

The components of this material are in compliance with the provisions of Australia National Industrial Chemical Notification and Assessment Scheme (NICNAS). Certain restrictions may apply. Contact the selling division for additional information.

The components of this product are in compliance with the new substance notification requirements of CEPA.

The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA Inventory.

Contact 3M for more information.

15.4. International Regulations

Contact 3M for more information.

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 16: Other information

NFPA Hazard Classification

Health: 2 Flammability: 4 Instability: 1 Special Hazards: None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

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Fiberlock IAQ 8500 Duct Sealer Black 8385

ICP Building Solutions Group

Version No: 6.8

Safety Data Sheet according to OSHA HazCom Standard (2012) requirements

Issue Date: 02/03/2020

Print Date: 02/03/2020

S.GHS.USA.EN

SECTION 1 IDENTIFICATION

Product Identifier

Product name	Fiberlock IAQ 8500 Duct Sealer Black 8385
Synonyms	Not Available
Other means of identification	Not Available

Recommended use of the chemical and restrictions on use

Relevant identified uses	Duct Sealant
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Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Registered company name	ICP Building Solutions Group
Address	150 Dascomb Road Andover MA United States
Telephone	1-978-623-9980
Fax	Not Available
Website	http://www.icpgroup.com
Email	Not Available

Emergency phone number

Association / Organisation	ChemTel
Emergency telephone numbers	800-255-3924
Other emergency telephone numbers	Not Available

SECTION 2 HAZARD(S) IDENTIFICATION

Classification of the substance or mixture

NFPA 704 diamond



Note: The hazard category numbers found in GHS classification in section 2 of this SDSs are NOT to be used to fill in the NFPA 704 diamond. Blue = Health Red = Fire Yellow = Reactivity White = Special (Oxidizer or water reactive substances)

Classification	Eye Irritation Category 2A, Chronic Aquatic Hazard Category 2, Specific target organ toxicity - repeated exposure Category 2, Acute Aquatic Hazard Category 3, Acute Toxicity (Inhalation) Category 4, Carcinogenicity Category 1A, Skin Sensitizer Category 1
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Label elements

Hazard pictogram(s)	
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SIGNAL WORD	DANGER
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Hazard statement(s)

H319	Causes serious eye irritation.
H411	Toxic to aquatic life with long lasting effects.
H373	May cause damage to organs through prolonged or repeated exposure.
H402	Harmful to aquatic life.
H332	Harmful if inhaled.

Fiberlock IAQ 8500 Duct Sealer Black 8385

H350	May cause cancer.
H317	May cause an allergic skin reaction.

Hazard(s) not otherwise classified

Not Applicable

Precautionary statement(s) General

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.

Precautionary statement(s) Prevention

P201	Obtain special instructions before use.
P260	Do not breathe mist/vapours/spray.

Precautionary statement(s) Response

P308+P313	IF exposed or concerned: Get medical advice/attention.
P321	Specific treatment (see advice on this label).

Precautionary statement(s) Storage

P405	Store locked up.
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Precautionary statement(s) Disposal

P501	Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.
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SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS**Substances**

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
1314-13-2	2.08-5.08	<u>zinc oxide</u>
56709-13-8	0.2	<u>azadioxabicyclooctane, isomer 1</u>
7320-34-5	0.1	<u>potassium pyrophosphate</u>
124-68-5	>0.81	<u>monoisobutanolamine</u>
27646-80-6	<0.06	<u>2-(methylamino)-2-methyl-1-propanol</u>
471-34-1	9.31	<u>calcium carbonate</u>
14808-60-7	0.04	<u>silica crystalline - quartz</u>
1332-58-7	9.4	<u>kaolin</u>
57-55-6	1.14-1.2	<u>propylene glycol</u>
7631-86-9	not spec	<u>silica amorphous</u>
1897-45-6	0.48	<u>chlorothalonil</u>
Not Available	1.4	<u>Non-hazardous ingredient</u>
1333-86-4	2.5	<u>carbon black</u>

SECTION 4 FIRST-AID MEASURES**Description of first aid measures**

Eye Contact	<p>If this product comes in contact with the eyes:</p> <ul style="list-style-type: none"> ▶ Wash out immediately with fresh running water. ▶ Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. ▶ Seek medical attention without delay; if pain persists or recurs seek medical attention. ▶ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	<p>If skin contact occurs:</p> <ul style="list-style-type: none"> ▶ Immediately remove all contaminated clothing, including footwear. ▶ Flush skin and hair with running water (and soap if available). ▶ Seek medical attention in event of irritation.
Inhalation	<ul style="list-style-type: none"> ▶ If fumes or combustion products are inhaled remove from contaminated area. ▶ Lay patient down. Keep warm and rested. ▶ Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. ▶ Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. ▶ Transport to hospital, or doctor.

Continued...

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Ingestion	<ul style="list-style-type: none"> ▶ Immediately give a glass of water. ▶ First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.
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Most important symptoms and effects, both acute and delayed

See Section 11

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 FIRE-FIGHTING MEASURES**Extinguishing media**

- ▶ Foam.
- ▶ Dry chemical powder.

Special hazards arising from the substrate or mixture

Fire Incompatibility	▶ Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result
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Special protective equipment and precautions for fire-fighters

Fire Fighting	<ul style="list-style-type: none"> ▶ Alert Fire Brigade and tell them location and nature of hazard. ▶ Wear full body protective clothing with breathing apparatus.
Fire/Explosion Hazard	<ul style="list-style-type: none"> ▶ Combustible. ▶ Slight fire hazard when exposed to heat or flame. Combustion products include: carbon dioxide (CO ₂) other pyrolysis products typical of burning organic material. May emit poisonous fumes. May emit corrosive fumes.

SECTION 6 ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

Minor Spills	Environmental hazard - contain spillage. <ul style="list-style-type: none"> ▶ Remove all ignition sources. ▶ Clean up all spills immediately.
Major Spills	Environmental hazard - contain spillage. Moderate hazard. <ul style="list-style-type: none"> ▶ Clear area of personnel and move upwind.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 HANDLING AND STORAGE**Precautions for safe handling**

Safe handling	<ul style="list-style-type: none"> ▶ Avoid all personal contact, including inhalation. ▶ Wear protective clothing when risk of exposure occurs. ▶ DO NOT allow clothing wet with material to stay in contact with skin
Other information	<ul style="list-style-type: none"> ▶ Store in original containers. ▶ Keep containers securely sealed.

Conditions for safe storage, including any incompatibilities

Suitable container	<ul style="list-style-type: none"> ▶ Metal can or drum ▶ Packaging as recommended by manufacturer. ▶ Check all containers are clearly labelled and free from leaks.
Storage incompatibility	Calcium carbonate: <ul style="list-style-type: none"> ▶ is incompatible with acids, ammonium salts, fluorine, germanium, lead diacetate, magnesium, mercurous chloride, silicon, silver nitrate, titanium. Contact with acid generates carbon dioxide gas, which may pressurise and then rupture closed containers <ul style="list-style-type: none"> ▶ Avoid reaction with oxidising agents

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

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Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
US NIOSH Recommended Exposure Limits (RELs)	zinc oxide	Zinc peroxide	Dust: 5 ,Fume: 5 mg/m3	Fume: 10 mg/m3	Dust: 15 mg/m3	Not Available
US ACGIH Threshold Limit Values (TLV)	zinc oxide	Zinc oxide	2 mg/m3	10 mg/m3	Not Available	TLV® Basis: Metal fume fever
US OSHA Permissible Exposure Levels (PELs) - Table Z1	zinc oxide	Zinc oxide: Respirable fraction	5 mg/m3	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Levels (PELs) - Table Z1	zinc oxide	Zinc oxide: Total dust	15 mg/m3	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Levels (PELs) - Table Z1	zinc oxide	Zinc oxide fume	5 mg/m3	Not Available	Not Available	Not Available
US NIOSH Recommended Exposure Limits (RELs)	calcium carbonate	Calcium salt of carbonic acid [Note: Occurs in nature as limestone, chalk, marble, dolomite, aragonite, calcite and oyster shells.]	10 (total), 5 (resp) mg/m3	Not Available	Not Available	Not Available
US NIOSH Recommended Exposure Limits (RELs)	calcium carbonate	Calcium carbonate, Natural calcium carbonate [Note: Marble is a metamorphic form of calcium carbonate.]	10 (total), 5 (resp) mg/m3	Not Available	Not Available	Not Available
US NIOSH Recommended Exposure Limits (RELs)	calcium carbonate	Calcium carbonate, Natural calcium carbonate [Note: Calcite & aragonite are commercially important natural calcium carbonates.]	10 (total), 5 (resp) mg/m3	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Levels (PELs) - Table Z1	calcium carbonate	Calcium carbonate: Total dust	15 mg/m3	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Levels (PELs) - Table Z1	calcium carbonate	Marble: Respirable fraction	5 mg/m3	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Levels (PELs) - Table Z1	calcium carbonate	Marble: Total dust	15 mg/m3	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Levels (PELs) - Table Z1	calcium carbonate	Limestone: Respirable fraction	5 mg/m3	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Levels (PELs) - Table Z1	calcium carbonate	Limestone: Total dust	15 mg/m3	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Levels (PELs) - Table Z1	calcium carbonate	Respirable fraction	5 mg/m3	Not Available	Not Available	Not Available
US NIOSH Recommended Exposure Limits (RELs)	silica crystalline - quartz	Cristobalite, Quartz, Tridymite, Tripoli	0.05 mg/m3	Not Available	Not Available	Ca See Appendix A
US OSHA Permissible Exposure Levels (PELs) - Table Z3	silica crystalline - quartz	Silica: Crystalline Quartz	10 / (% SiO ₂ + 2) mg/m3 / 250 / (%SiO ₂ + 5) mppcf	Not Available	Not Available	(Name ((Respirable)) ((f) This standard applies to any operations or sectors for which the respirable crystalline silica standard, 1910.1053, is stayed or is otherwise not in effect.)); (TWA mppcf (((b) The percentage of crystalline silica in the formula is the amount determined from airborne samples, except in those instances in which other methods have been shown to be applicable.)); (TWA mg/m3 (((e) Both concentration and percent quartz for the application of this limit are to be determined from the fraction passing a size-selector with the following characteristics: Aerodynamic diameter (unit density sphere), Percent passing selector 2, 90 2.5, 75 3.5, 50 5.0, 25 10, 0. The measurements under this note refer to the use of an AEC (now NRC) instrument. The respirable fraction of coal dust is determined with an MRE; the figure corresponding to that of 2.4 mg/m3 in the table for coal dust is 4.5 mg/m3K.)))
US ACGIH Threshold Limit Values (TLV)	silica crystalline - quartz	Silica, crystalline - α-quartz and cristobalite	0.025 mg/m3	Not Available	Not Available	TLV® Basis: Pulm fibrosis; lung cancer
US OSHA Permissible Exposure Levels (PELs) - Table Z1	silica crystalline - quartz	Silica, crystalline, respirable dust: Quartz	Not Available	Not Available	Not Available	see 1910.1053; (7) See Table Z-3 for the exposure limit for any operations or sectors where the exposure limit in § 1910.1053 is stayed or is otherwise not in effect.
US NIOSH Recommended Exposure Limits (RELs)	kaolin	China clay, Clay, Hydrated aluminum silicate, Hydrate,	10 (total), 5 (resp) mg/m3	Not Available	Not Available	Not Available

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		Porcelain clay [Note: Main constituent of Kaolin is Kaolinite (Al ₂ Si ₂ O ₅ (OH) ₄ .]				
US ACGIH Threshold Limit Values (TLV)	kaolin	Kaolin	2 mg/m ³	Not Available	Not Available	TLV® Basis: Pneumoconiosis
US OSHA Permissible Exposure Levels (PELs) - Table Z1	kaolin	Kaolin: Respirable fraction	5 mg/m ³	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Levels (PELs) - Table Z1	kaolin	Kaolin: Total dust	15 mg/m ³	Not Available	Not Available	Not Available
US NIOSH Recommended Exposure Limits (RELs)	silica amorphous	Diatomaceous earth, Diatomaceous silica, Diatomite, Precipitated amorphous silica, Silica gel, Silicon dioxide (amorphous)	6 mg/m ³	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Levels (PELs) - Table Z3	silica amorphous	Amorphous	80 / (%SiO ₂) mg/m ³ / 20 mppcf	Not Available	Not Available	(Name (including natural diatomaceous earth))
US OSHA Permissible Exposure Levels (PELs) - Table Z1	silica amorphous	Silica, amorphous, precipitated and gel	Not Available	Not Available	Not Available	See Table Z-3
US OSHA Permissible Exposure Levels (PELs) - Table Z1	silica amorphous	Silica, fused, respirable dust	Not Available	Not Available	Not Available	See Table Z-3
US OSHA Permissible Exposure Levels (PELs) - Table Z1	silica amorphous	Silica, amorphous, diatomaceous earth, containing less than 1% crystalline silica	Not Available	Not Available	Not Available	See Table Z-3
US NIOSH Recommended Exposure Limits (RELs)	carbon black	Acetylene black, Channel black, Furnace black, Lamp black, Thermal black	3.5 mg/m ³	Not Available	Not Available	Ca See Appendix A See Appendix C
US ACGIH Threshold Limit Values (TLV)	carbon black	Carbon black	3 mg/m ³	Not Available	Not Available	TLV® Basis: Bronchitis
US OSHA Permissible Exposure Levels (PELs) - Table Z1	carbon black	Carbon black	3.5 mg/m ³	Not Available	Not Available	Not Available

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
zinc oxide	Zinc oxide	10 mg/m ³	15 mg/m ³	2,500 mg/m ³
potassium pyrophosphate	Potassium pyrophosphate; (Tetrapotassium diphosphate)	61 mg/m ³	680 mg/m ³	1,200 mg/m ³
monoisobutanolamine	Isobutanol-2-amine	17 mg/m ³	190 mg/m ³	570 mg/m ³
calcium carbonate	Limestone; (Calcium carbonate; Dolomite)	45 mg/m ³	500 mg/m ³	3,000 mg/m ³
calcium carbonate	Carbonic acid, calcium salt	45 mg/m ³	210 mg/m ³	1,300 mg/m ³
silica crystalline - quartz	Silica, crystalline-quartz; (Silicon dioxide)	0.075 mg/m ³	33 mg/m ³	200 mg/m ³
propylene glycol	Polypropylene glycols	30 mg/m ³	330 mg/m ³	2,000 mg/m ³
propylene glycol	Propylene glycol; (1,2-Propanediol)	30 mg/m ³	1,300 mg/m ³	7,900 mg/m ³
silica amorphous	Silica gel, amorphous synthetic	18 mg/m ³	200 mg/m ³	1,200 mg/m ³
silica amorphous	Silica, amorphous fumed	18 mg/m ³	100 mg/m ³	630 mg/m ³
silica amorphous	Siloxanes and silicones, dimethyl, reaction products with silica; (Hydrophobic silicon dioxide, amorphous)	120 mg/m ³	1,300 mg/m ³	7,900 mg/m ³
silica amorphous	Silica, amorphous fume	45 mg/m ³	500 mg/m ³	3,000 mg/m ³
silica amorphous	Silica amorphous hydrated	18 mg/m ³	220 mg/m ³	1,300 mg/m ³
chlorothalonil	Chlorothalonil; (Tetrachloroisophthalonitrile)	0.13 mg/m ³	1.4 mg/m ³	8.6 mg/m ³
carbon black	Carbon black	9 mg/m ³	99 mg/m ³	590 mg/m ³

Ingredient	Original IDLH	Revised IDLH
zinc oxide	500 mg/m ³	Not Available
azadioxabicyclooctane, isomer 1	Not Available	Not Available
potassium pyrophosphate	Not Available	Not Available
monoisobutanolamine	Not Available	Not Available

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2-(methylamino)-2-methyl-1-propanol	Not Available	Not Available
calcium carbonate	Not Available	Not Available
silica crystalline - quartz	25 mg/m ³ / 50 mg/m ³	Not Available
kaolin	Not Available	Not Available
propylene glycol	Not Available	Not Available
silica amorphous	3,000 mg/m ³	Not Available
chlorothalonil	Not Available	Not Available
Non-hazardous ingredient	Not Available	Not Available
carbon black	1,750 mg/m ³	Not Available


OCCUPATIONAL EXPOSURE BANDING

Ingredient	Occupational Exposure Band Rating	Occupational Exposure Band Limit
azadioxabicyclooctane, isomer 1	E	≤ 0.01 mg/m ³
potassium pyrophosphate	E	≤ 0.01 mg/m ³
monoisobutanolamine	E	≤ 0.01 mg/m ³
2-(methylamino)-2-methyl-1-propanol	E	≤ 0.01 mg/m ³
propylene glycol	E	≤ 0.1 ppm
chlorothalonil	E	≤ 0.01 mg/m ³

Notes:

Occupational exposure banding is a process of assigning chemicals into specific categories or bands based on a chemical's potency and the adverse health outcomes associated with exposure. The output of this process is an occupational exposure band (OEB), which corresponds to a range of exposure concentrations that are expected to protect worker health.

Exposure controls

Appropriate engineering controls	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.
Personal protection	
Eye and face protection	<ul style="list-style-type: none"> ▶ Safety glasses with side shields. ▶ Chemical goggles.
Skin protection	See Hand protection below
Hands/feet protection	<ul style="list-style-type: none"> ▶ Wear chemical protective gloves, e.g. PVC. ▶ Wear safety footwear or safety gumboots, e.g. Rubber <p>NOTE:</p> <ul style="list-style-type: none"> ▶ The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact. <p>The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.</p>
Body protection	See Other protection below
Other protection	<ul style="list-style-type: none"> ▶ Overalls. ▶ P.V.C.

Respiratory protection

Type A Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

- ▶ Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content.
- ▶ The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate.
- ▶ Cartridge performance is affected by humidity. Cartridges should be changed after 2 hr of continuous use unless it is determined that the humidity is less than 75%, in which case, cartridges can be used for 4 hr. Used cartridges should be discarded daily, regardless of the length of time used

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Text		
Physical state	Liquid	Relative density (Water = 1)	Not Available
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	8.5	Decomposition temperature	Not Available

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Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	Not Available	Molecular weight (g/mol)	Not Available
Flash point (°C)	Not Available	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Available	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water	Immiscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	<ul style="list-style-type: none"> ▶ Unstable in the presence of incompatible materials. ▶ Product is considered stable.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may be harmful. The material is not thought to produce respiratory irritation (as classified by EC Directives using animal models). Nevertheless inhalation of vapours, fumes or aerosols, especially for prolonged periods, may produce respiratory discomfort and occasionally, distress.
Ingestion	The material is not thought to produce adverse health effects following ingestion (as classified by EC Directives using animal models). Nevertheless, adverse systemic effects have been produced following exposure of animals by at least one other route and good hygiene practice requires that exposure be kept to a minimum. Ingestion of propylene glycol produced reversible central nervous system depression in humans following ingestion of 60 ml. Symptoms included increased heart-rate (tachycardia), excessive sweating (diaphoresis) and grand mal seizures in a 15 month child who ingested large doses (7.5 ml/day for 8 days) as an ingredient of vitamin preparation.
Skin Contact	There is some evidence to suggest that this material can cause inflammation of the skin on contact in some persons. Open cuts, abraded or irritated skin should not be exposed to this material. Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.
Eye	This material can cause eye irritation and damage in some persons.
Chronic	Studies show that inhaling this substance for over a long period (e.g. in an occupational setting) may increase the risk of cancer. Repeated or long-term occupational exposure is likely to produce cumulative health effects involving organs or biochemical systems. Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general population. Chronic dust inhalation of kaolin, can cause kaolinosis from kaolin deposition in the lungs causing distinct lung markings, abnormal inflation of air sacs, and chronic lung diseases (nodular pneumoconiosis). This condition is made worse by long duration of occupational exposure and pre-existing chest infection. Pre-employment screening is recommended. There has been concern that this material can cause cancer or mutations, but there is not enough data to make an assessment. Propylene glycol is thought to be sensitizing following the regular use of topical creams by eczema patients. Testing in humans showed that 16% of exposed individuals, irritation occurred, with 12.5% showing toxic or allergic reactions.

Fiberlock IAQ 8500 Duct Sealer Black 8385	TOXICITY	IRRITATION
	Not Available	Not Available
zinc oxide	TOXICITY	IRRITATION
	dermal (rat) LD50: >2000 mg/kg ^[1]	Eye (rabbit) : 500 mg/24 h - mild
	Inhalation (rat) LC50: >1.79 mg/l4 h ^[1]	Eye: no adverse effect observed (not irritating) ^[1]
	Oral (rat) LD50: >5000 mg/kg ^[2]	Skin (rabbit) : 500 mg/24 h - mild
		Skin: no adverse effect observed (not irritating) ^[1]
azadioxabicyclooctane, isomer 1	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: >2000 mg/kg ^[2]	Not Available

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	Oral (rat) LD50: 2950 mg/kg ^[2]	
potassium pyrophosphate	TOXICITY	IRRITATION
	dermal (rat) LD50: >2000 mg/kg ^[1]	Eye: adverse effect observed (irritating) ^[1]
	Oral (rat) LD50: >300-2000 mg/kg ^[1]	Skin: no adverse effect observed (not irritating) ^[1]
monoisobutanolamine	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: >2000 mg/kg ^[2]	Not Available
	Oral (rat) LD50: 2900 mg/kg ^[2]	
2-(methylamino)-2-methyl-1-propanol	TOXICITY	IRRITATION
	Not Available	Not Available
calcium carbonate	TOXICITY	IRRITATION
	dermal (rat) LD50: >2000 mg/kg ^[1]	Eye (rabbit): 0.75 mg/24h - SEVERE
	Oral (rat) LD50: >2000 mg/kg ^[1]	Eye: no adverse effect observed (not irritating) ^[1]
		Skin (rabbit): 500 mg/24h-moderate
		Skin: no adverse effect observed (not irritating) ^[1]
silica crystalline - quartz	TOXICITY	IRRITATION
	Oral (rat) LD50: =500 mg/kg ^[2]	Not Available
kaolin	TOXICITY	IRRITATION
	Not Available	Not Available
propylene glycol	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: 11890 mg/kg ^[2]	Eye (rabbit): 100 mg - mild
	Inhalation (rat) LC50: >44.9 mg/l/4H ^[2]	Eye (rabbit): 500 mg/24h - mild
	Oral (rat) LD50: 20000 mg/kg ^[2]	Eye: no adverse effect observed (not irritating) ^[1]
		Skin(human):104 mg/3d Intermit Mod
		Skin(human):500 mg/7days mild
		Skin: no adverse effect observed (not irritating) ^[1]
silica amorphous	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: >5000 mg/kg ^[2]	Eye (rabbit): non-irritating *
	Inhalation (rat) LC50: >0.139 mg/l/14h**[Grace] ^[2]	Eye: no adverse effect observed (not irritating) ^[1]
	Oral (rat) LD50: 3160 mg/kg ^[2]	Skin (rabbit): non-irritating *
		Skin: no adverse effect observed (not irritating) ^[1]
chlorothalonil	TOXICITY	IRRITATION
	dermal (rat) LD50: >2500 mg/kg ^[2]	Not Available
	Inhalation (rat) LC50: 0.0775 mg/l/1h ^[2]	
	Oral (rat) LD50: >5000 mg/kg ^[2]	
Non-hazardous ingredient	TOXICITY	IRRITATION
	Not Available	Not Available
carbon black	TOXICITY	IRRITATION
	dermal (rat) LD50: >2000 mg/kg ^[1]	Eye: no adverse effect observed (not irritating) ^[1]
	Oral (rat) LD50: >15400 mg/kg ^[2]	Skin: no adverse effect observed (not irritating) ^[1]
Legend:	1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2. * Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances	

AZADIOXABICYCLOOCTANE, ISOMER 1	For azadioxabicyclooctanes: The acute oral and dermal toxicities of azadioxabicyclooctane are low. The acute inhalation toxicity showed a median lethal dose range of between 0.441 mg/L and 0.819 mg/L in males, and between 0.819 mg/L and 1.397 mg/L in females, with epistaxis, labored breathing, rales, and rhinorrhoea in all dose groups. * CCInfo
POTASSIUM PYROPHOSPHATE	No data available. Data for sodium analogue only. tetrasodium pyrophosphate
MONOISOBUTANOLAMINE	TRIS AMINO and its surrogate chemicals have very little, if any, toxicity. They are mildly irritating to eyes at moderate concentrations, and do not cause allergic skin reactions.

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CALCIUM CARBONATE	No evidence of carcinogenic properties. No evidence of mutagenic or teratogenic effects. The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.
SILICA CRYSTALLINE - QUARTZ	WARNING: For inhalation exposure <u>ONLY</u> : This substance has been classified by the IARC as Group 1: CARCINOGENIC TO HUMANS The International Agency for Research on Cancer (IARC) has classified occupational exposures to respirable (<5 um) crystalline silica as being carcinogenic to humans . This classification is based on what IARC considered sufficient evidence from epidemiological studies of humans for the carcinogenicity of inhaled silica in the forms of quartz and cristobalite.
KAOLIN	For bentonite clays: Bentonite (CAS No. 1302-78-9) consists of a group of clays formed by crystallization of vitreous volcanic ashes that were deposited in water. The expected acute oral toxicity of bentonite in humans is very low.
SILICA AMORPHOUS	Reports indicate high/prolonged exposures to amorphous silicas induced lung fibrosis in experimental animals; in some experiments these effects were reversible. [PATTYS] For silica amorphous: When experimental animals inhale synthetic amorphous silica (SAS) dust, it dissolves in the lung fluid and is rapidly eliminated. If swallowed, the vast majority of SAS is excreted in the faeces and there is little accumulation in the body. The substance is classified by IARC as Group 3: NOT classifiable as to its carcinogenicity to humans. Evidence of carcinogenicity may be inadequate or limited in animal testing.
CHLOROTHALONIL	Chlorothalonil has low toxicity, according to animal testing. It irritates the skin and eye. ADI: 0.01 mg/kg/day NOEL: 1.5 mg/kg/day
CARBON BLACK	Inhalation (rat) TCLo: 50 mg/m ³ /6h/90D-I Nil reported
Fiberlock IAQ 8500 Duct Sealer Black 8385 & AZADIOXABICYCLOOCTANE, ISOMER 1 & CHLOROTHALONIL	The following information refers to contact allergens as a group and may not be specific to this product. Contact allergies quickly manifest themselves as contact eczema, more rarely as urticaria or Quincke's oedema. The pathogenesis of contact eczema involves a cell-mediated (T lymphocytes) immune reaction of the delayed type.
Fiberlock IAQ 8500 Duct Sealer Black 8385 & PROPYLENE GLYCOL	The acute oral toxicity of propylene glycol is very low; large amounts are needed to cause perceptible health damage in humans. Serious toxicity generally occurs only at blood concentrations over 1 g/L, which requires extremely high intake over a relatively short period of time; this is nearly impossible with consuming foods or supplements which contain 1g/kg of PG at most.
ZINC OXIDE & CALCIUM CARBONATE & PROPYLENE GLYCOL	The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.
AZADIOXABICYCLOOCTANE, ISOMER 1 & POTASSIUM PYROPHOSPHATE & CALCIUM CARBONATE & CHLOROTHALONIL	Asthma-like symptoms may continue for months or even years after exposure to the material ends. This may be due to a non-allergic condition known as reactive airways dysfunction syndrome (RADS) which can occur after exposure to high levels of highly irritating compound.
2-(METHYLAMINO)-2-METHYL-1-PROPANOL & KAOLIN & CARBON BLACK	No significant acute toxicological data identified in literature search.
CHLOROTHALONIL & CARBON BLACK	WARNING: This substance has been classified by the IARC as Group 2B: Possibly Carcinogenic to Humans.

Acute Toxicity	✓	Carcinogenicity	✓
Skin Irritation/Corrosion	✗	Reproductivity	✗
Serious Eye Damage/Irritation	✓	STOT - Single Exposure	✗
Respiratory or Skin sensitisation	✓	STOT - Repeated Exposure	✓
Mutagenicity	✗	Aspiration Hazard	✗

Legend: ✗ – Data either not available or does not fill the criteria for classification
 ✓ – Data available to make classification

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

Fiberlock IAQ 8500 Duct Sealer Black 8385	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	Not Available	Not Available	Not Available	Not Available	Not Available
zinc oxide	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	LC50	96	Fish	0.001-0.58mg/L	2
	EC50	48	Crustacea	0.001-0.014mg/L	2
	EC50	72	Algae or other aquatic plants	0.037mg/L	2
	BCF	336	Fish	4376.673mg/L	4
NOEC	72	Algae or other aquatic plants	0.00008138mg/L	2	
azadioxabicyclooctane, isomer 1	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	LC50	96	Fish	28073.682mg/L	3
	EC50	96	Algae or other aquatic plants	503.941mg/L	3
	LC50	96	Fish	7479.033mg/L	3
EC50	96	Algae or other aquatic plants	193.440mg/L	3	

Continued...

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potassium pyrophosphate	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	LC50	96	Fish	>100mg/L	2
	EC50	48	Crustacea	>100mg/L	2
	EC50	72	Algae or other aquatic plants	>100mg/L	2
	NOEC	72	Algae or other aquatic plants	>100mg/L	2
monoisobutanolamine	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	LC50	96	Fish	=100mg/L	1
	EC50	48	Crustacea	=193mg/L	1
	EC50	96	Algae or other aquatic plants	52.872mg/L	3
	NOEC	48	Crustacea	100mg/L	2
2-(methylamino)-2-methyl-1-propanol	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	Not Available	Not Available	Not Available	Not Available	Not Available
calcium carbonate	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	LC50	96	Fish	>56000mg/L	4
	EC50	72	Algae or other aquatic plants	>14mg/L	2
	EC10	72	Algae or other aquatic plants	>14mg/L	2
	NOEC	72	Algae or other aquatic plants	14mg/L	2
silica crystalline - quartz	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	Not Available	Not Available	Not Available	Not Available	Not Available
kaolin	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	Not Available	Not Available	Not Available	Not Available	Not Available
propylene glycol	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	LC50	96	Fish	>10-mg/L	2
	EC50	48	Crustacea	43-500mg/L	2
	EC50	96	Algae or other aquatic plants	19-mg/L	2
	NOEC	168	Fish	11-530mg/L	2
silica amorphous	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	LC50	96	Fish	1-289.09mg/L	2
	EC50	48	Crustacea	ca.7600mg/L	1
	EC50	72	Algae or other aquatic plants	440mg/L	1
	NOEC	720	Crustacea	34.223mg/L	2
chlorothalonil	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	LC50	96	Fish	0.0076mg/L	4
	EC50	48	Crustacea	0.0066475mg/L	4
	EC50	72	Algae or other aquatic plants	0.0068mg/L	4
	NOEC	240	Crustacea	0.0003mg/L	4
Non-hazardous ingredient	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	Not Available	Not Available	Not Available	Not Available	Not Available
carbon black	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	LC50	96	Fish	>100mg/L	2
	EC50	48	Crustacea	>100mg/L	2
	EC50	72	Algae or other aquatic plants	>10-mg/L	2
	EC10	72	Algae or other aquatic plants	>10-mg/L	2
	NOEC	96	Fish	>=1-mg/L	2

Legend:

Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 (QSAR) - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Continued...

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Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters.

Bentonite and kaolin have low toxicity to aquatic species, a large number of which have been tested

Propylene glycol is known to exert high levels of biochemical oxygen demand (BOD) during degradation in surface waters. This process can adversely affect aquatic life by consuming oxygen needed by aquatic organisms for survival.

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
azadioxabicyclooctane, isomer 1	HIGH	HIGH
monoisobutanolamine	LOW	LOW
propylene glycol	LOW	LOW
silica amorphous	LOW	LOW
chlorothalonil	HIGH	HIGH

Bioaccumulative potential

Ingredient	Bioaccumulation
zinc oxide	LOW (BCF = 217)
azadioxabicyclooctane, isomer 1	LOW (LogKOW = -1.5532)
monoisobutanolamine	LOW (BCF = 330)
propylene glycol	LOW (BCF = 1)
silica amorphous	LOW (LogKOW = 0.5294)
chlorothalonil	LOW (BCF = 125)

Mobility in soil

Ingredient	Mobility
azadioxabicyclooctane, isomer 1	LOW (KOC = 10)
monoisobutanolamine	MEDIUM (KOC = 2.196)
propylene glycol	HIGH (KOC = 1)
silica amorphous	LOW (KOC = 23.74)
chlorothalonil	LOW (KOC = 2392)


SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / Packaging disposal	<ul style="list-style-type: none"> ▶ Containers may still present a chemical hazard/ danger when empty. ▶ Return to supplier for reuse/ recycling if possible. <p>Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area.</p> <ul style="list-style-type: none"> ▶ DO NOT allow wash water from cleaning or process equipment to enter drains. ▶ It may be necessary to collect all wash water for treatment before disposal. ▶ Recycle wherever possible or consult manufacturer for recycling options. ▶ Consult State Land Waste Authority for disposal.
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SECTION 14 TRANSPORT INFORMATION

Labels Required

Marine Pollutant	
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Land transport (DOT): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

SECTION 15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation specific for the substance or mixture

ZINC OXIDE IS FOUND ON THE FOLLOWING REGULATORY LISTS

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International Air Transport Association (IATA) Dangerous Goods Regulations
 International Maritime Dangerous Goods Requirements (IMDG Code)
 United Nations Recommendations on the Transport of Dangerous Goods Model Regulations
 US - Alaska Limits for Air Contaminants
 US - California Permissible Exposure Limits for Chemical Contaminants
 US - Hawaii Air Contaminant Limits
 US - Idaho - Limits for Air Contaminants
 US - Idaho Toxic Air Pollutants Non- Carcinogenic Increments - Occupational Exposure Limits
 US - Michigan Exposure Limits for Air Contaminants
 US - Minnesota Permissible Exposure Limits (PELs)
 US - Oregon Permissible Exposure Limits (Z-1)
 US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants
 US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminants
 US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air Contaminants
 US - Washington Permissible exposure limits of air contaminants
 US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants
 US ACGIH Threshold Limit Values (Spanish)

US ACGIH Threshold Limit Values (TLV)
 US AIHA Workplace Environmental Exposure Levels (WEELs)
 US CWA (Clean Water Act) - Priority Pollutants
 US CWA (Clean Water Act) - Toxic Pollutants
 US Department of Transportation (DOT), Hazardous Material Table
 US DOE Temporary Emergency Exposure Limits (TEELs)
 US EPA Carcinogens Listing
 US EPCRA Section 313 Chemical List
 US NIOSH Recommended Exposure Limits (RELs)
 US NIOSH Recommended Exposure Limits (RELs) (Spanish)
 US OSHA Permissible Exposure Levels (PELs) - Table Z1
 US OSHA Permissible Exposure Limits - Annotated Table Z-1 (Spanish)
 US OSHA Permissible Exposure Limits - Annotated Table Z-3 (Spanish)
 US Postal Service (USPS) Hazardous Materials Table: Postal Service Mailability Guide
 US Postal Service (USPS) Numerical Listing of Proper Shipping Names by Identification (ID) Number
 US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory
 US TSCA Chemical Substance Inventory - Interim List of Active Substances

AZADIOXABICYCLOCTANE, ISOMER 1 IS FOUND ON THE FOLLOWING REGULATORY LISTS

International Air Transport Association (IATA) Dangerous Goods Regulations
 International Maritime Dangerous Goods Requirements (IMDG Code)
 United Nations Recommendations on the Transport of Dangerous Goods Model Regulations
 US Department of Transportation (DOT), Hazardous Material Table

US Postal Service (USPS) Hazardous Materials Table: Postal Service Mailability Guide
 US Postal Service (USPS) Numerical Listing of Proper Shipping Names by Identification (ID) Number
 US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory
 US TSCA Chemical Substance Inventory - Interim List of Active Substances

POTASSIUM PYROPHOSPHATE IS FOUND ON THE FOLLOWING REGULATORY LISTS

GESAMP/EHS Composite List - GESAMP Hazard Profiles
 International Air Transport Association (IATA) Dangerous Goods Regulations
 International Maritime Dangerous Goods Requirements (IMDG Code)
 United Nations Recommendations on the Transport of Dangerous Goods Model Regulations
 US Department of Transportation (DOT), Hazardous Material Table

US DOE Temporary Emergency Exposure Limits (TEELs)
 US Postal Service (USPS) Hazardous Materials Table: Postal Service Mailability Guide
 US Postal Service (USPS) Numerical Listing of Proper Shipping Names by Identification (ID) Number
 US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory
 US TSCA Chemical Substance Inventory - Interim List of Active Substances

MONOISOBUTANOLAMINE IS FOUND ON THE FOLLOWING REGULATORY LISTS

GESAMP/EHS Composite List - GESAMP Hazard Profiles
 IMO IBC Code Chapter 17: Summary of minimum requirements
 IMO MARPOL (Annex II) - List of Noxious Liquid Substances Carried in Bulk
 US Coast Guard, Department of Homeland Security Part 153: Ships Carrying Bulk Liquid, Liquefied gas or compressed gas hazardous materials. Table 1 to Part 153 --Summary of Minimum Requirements

US DOE Temporary Emergency Exposure Limits (TEELs)
 US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory
 US TSCA Chemical Substance Inventory - Interim List of Active Substances

2-(METHYLAMINO)-2-METHYL-1-PROPANOL IS FOUND ON THE FOLLOWING REGULATORY LISTS

Not Applicable

CALCIUM CARBONATE IS FOUND ON THE FOLLOWING REGULATORY LISTS

GESAMP/EHS Composite List - GESAMP Hazard Profiles
 IMO IBC Code Chapter 18: List of products to which the Code does not apply
 US - Alaska Limits for Air Contaminants
 US - Hawaii Air Contaminant Limits
 US - Idaho - Limits for Air Contaminants
 US - Idaho Toxic Air Pollutants Non- Carcinogenic Increments - Occupational Exposure Limits
 US - Michigan Exposure Limits for Air Contaminants
 US - Minnesota Permissible Exposure Limits (PELs)
 US - Oregon Permissible Exposure Limits (Z-1)
 US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants
 US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminants

US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air Contaminants
 US - Washington Permissible exposure limits of air contaminants
 US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants
 US ACGIH Threshold Limit Values (Spanish)
 US DOE Temporary Emergency Exposure Limits (TEELs)
 US NIOSH Recommended Exposure Limits (RELs)
 US NIOSH Recommended Exposure Limits (RELs) (Spanish)
 US OSHA Permissible Exposure Levels (PELs) - Table Z1
 US OSHA Permissible Exposure Limits - Annotated Table Z-1 (Spanish)
 US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory
 US TSCA Chemical Substance Inventory - Interim List of Active Substances

SILICA CRYSTALLINE - QUARTZ IS FOUND ON THE FOLLOWING REGULATORY LISTS

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Chemical Footprint Project - Chemicals of High Concern List
 International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs
 International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 1 : Carcinogenic to humans
 US - Alaska Limits for Air Contaminants
 US - California Permissible Exposure Limits for Chemical Contaminants
 US - Hawaii Air Contaminant Limits
 US - Idaho - Limits for Air Contaminants
 US - Idaho Toxic Air Pollutants Non- Carcinogenic Increments - Occupational Exposure Limits
 US - Idaho - Toxic and Hazardous Substances - Mineral Dust
 US - Michigan Exposure Limits for Air Contaminants
 US - Minnesota Permissible Exposure Limits (PELs)
 US - Oregon Permissible Exposure Limits (Z-1)
 US - Oregon Permissible Exposure Limits (Z-3)
 US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants
 US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminants
 US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air Contaminants

KAOLIN IS FOUND ON THE FOLLOWING REGULATORY LISTS

Chemical Footprint Project - Chemicals of High Concern List
 GESAMP/EHS Composite List - GESAMP Hazard Profiles
 IMO IBC Code Chapter 18: List of products to which the Code does not apply
 International WHO List of Proposed Occupational Exposure Limit (OEL) Values for Manufactured Nanomaterials (MNMS)
 US - Alaska Limits for Air Contaminants
 US - California Permissible Exposure Limits for Chemical Contaminants
 US - Hawaii Air Contaminant Limits
 US - Idaho - Limits for Air Contaminants
 US - Idaho Toxic Air Pollutants Non- Carcinogenic Increments - Occupational Exposure Limits
 US - Minnesota Permissible Exposure Limits (PELs)
 US - Oregon Permissible Exposure Limits (Z-1)
 US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants
 US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminants

PROPYLENE GLYCOL IS FOUND ON THE FOLLOWING REGULATORY LISTS

GESAMP/EHS Composite List - GESAMP Hazard Profiles
 IMO IBC Code Chapter 17: Summary of minimum requirements
 IMO IBC Code Chapter 18: List of products to which the Code does not apply
 IMO MARPOL (Annex II) - List of Noxious Liquid Substances Carried in Bulk
 IMO MARPOL 73/78 (Annex II) - List of Other Liquid Substances
 IMO Provisional Categorization of Liquid Substances - List 3: (Trade-named) mixtures containing at least 99% by weight of components already assessed by IMO, presenting safety hazards
 US ATSDR Minimal Risk Levels for Hazardous Substances (MRLs)

SILICA AMORPHOUS IS FOUND ON THE FOLLOWING REGULATORY LISTS

GESAMP/EHS Composite List - GESAMP Hazard Profiles
 International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs
 International WHO List of Proposed Occupational Exposure Limit (OEL) Values for Manufactured Nanomaterials (MNMS)
 US - Alaska Limits for Air Contaminants
 US - California Permissible Exposure Limits for Chemical Contaminants
 US - Hawaii Air Contaminant Limits
 US - Idaho - Limits for Air Contaminants
 US - Idaho Toxic Air Pollutants Non- Carcinogenic Increments - Occupational Exposure Limits
 US - Idaho - Toxic and Hazardous Substances - Mineral Dust
 US - Michigan Exposure Limits for Air Contaminants
 US - Minnesota Permissible Exposure Limits (PELs)
 US - Oregon Permissible Exposure Limits (Z-3)
 US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants
 US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminants

CHLOROTHALONIL IS FOUND ON THE FOLLOWING REGULATORY LISTS

US - Washington Permissible exposure limits of air contaminants
 US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants
 US - Wyoming Toxic and Hazardous Substances Table Z-3 Mineral Dusts
 US ACGIH Threshold Limit Values (Spanish)
 US ACGIH Threshold Limit Values (TLV)
 US AIHA Workplace Environmental Exposure Levels (WEELs)
 US DOE Temporary Emergency Exposure Limits (TEELs)
 US National Toxicology Program (NTP) 14th Report Part A Known to be Human Carcinogens
 US NIOSH Recommended Exposure Limits (RELs)
 US NIOSH Recommended Exposure Limits (RELs) (Spanish)
 US OSHA Permissible Exposure Levels (PELs) - Table Z1
 US OSHA Permissible Exposure Levels (PELs) - Table Z3
 US OSHA Permissible Exposure Limits - Annotated Table Z-1 (Spanish)
 US OSHA Permissible Exposure Limits - Annotated Table Z-3 (Spanish)
 US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory
 US TSCA Chemical Substance Inventory - Interim List of Active Substances

US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air Contaminants
 US - Washington Permissible exposure limits of air contaminants
 US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants
 US ACGIH Threshold Limit Values (Spanish)
 US ACGIH Threshold Limit Values (TLV)
 US AIHA Workplace Environmental Exposure Levels (WEELs)
 US NIOSH Recommended Exposure Limits (RELs)
 US NIOSH Recommended Exposure Limits (RELs) (Spanish)
 US OSHA Permissible Exposure Levels (PELs) - Table Z1
 US OSHA Permissible Exposure Limits - Annotated Table Z-1 (Spanish)
 US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory
 US TSCA Chemical Substance Inventory - Interim List of Active Substances

US DOE Temporary Emergency Exposure Limits (TEELs)
 US DOT Coast Guard Bulk Hazardous Materials - List of Flammable and Combustible Bulk Liquid Cargoes
 US Spacecraft Maximum Allowable Concentrations (SMACs) for Airborne Contaminants
 US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory
 US Toxicology Excellence for Risk Assessment (TERA) Workplace Environmental Exposure Levels (WEEL)
 US TSCA Chemical Substance Inventory - Interim List of Active Substances

US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air Contaminants
 US - Washington Permissible exposure limits of air contaminants
 US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants
 US - Wyoming Toxic and Hazardous Substances Table Z-3 Mineral Dusts
 US ACGIH Threshold Limit Values (Spanish)
 US DOE Temporary Emergency Exposure Limits (TEELs)
 US NIOSH Recommended Exposure Limits (RELs)
 US NIOSH Recommended Exposure Limits (RELs) (Spanish)
 US OSHA Permissible Exposure Levels (PELs) - Table Z1
 US OSHA Permissible Exposure Levels (PELs) - Table Z3
 US OSHA Permissible Exposure Limits - Annotated Table Z-1 (Spanish)
 US OSHA Permissible Exposure Limits - Annotated Table Z-3 (Spanish)
 US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory
 US TSCA Chemical Substance Inventory - Interim List of Active Substances

Fiberlock IAQ 8500 Duct Sealer Black 8385

Chemical Footprint Project - Chemicals of High Concern List
 International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs
 International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 2B : Possibly carcinogenic to humans
 International Air Transport Association (IATA) Dangerous Goods Regulations
 International Maritime Dangerous Goods Requirements (IMDG Code)
 United Nations Recommendations on the Transport of Dangerous Goods Model Regulations
 US - California Office of Environmental Health Hazard Assessment Proposition 65 No Significant Risk Levels (NSRLs) for Carcinogens and Maximum Allowable Dose Levels (MADLs) for Chemicals Causing Reproductive Toxicity
 US - California Proposition 65 - Carcinogens

US - California Proposition 65 - No Significant Risk Levels (NSRLs) for Carcinogens
 US Department of Transportation (DOT), Hazardous Material Table
 US DOE Temporary Emergency Exposure Limits (TEELs)
 US EPCRA Section 313 Chemical List
 US List of Active Substances Exempt from the TSCA Inventory Notifications (Active-Inactive) Rule
 US Postal Service (USPS) Hazardous Materials Table: Postal Service Mailability Guide
 US Postal Service (USPS) Numerical Listing of Proper Shipping Names by Identification (ID) Number
 US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

NON-HAZARDOUS INGREDIENT IS FOUND ON THE FOLLOWING REGULATORY LISTS

Not Applicable

CARBON BLACK IS FOUND ON THE FOLLOWING REGULATORY LISTS

Chemical Footprint Project - Chemicals of High Concern List
 International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs
 International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 2B : Possibly carcinogenic to humans
 International WHO List of Proposed Occupational Exposure Limit (OEL) Values for Manufactured Nanomaterials (MNMS)
 US - Alaska Limits for Air Contaminants
 US - California Permissible Exposure Limits for Chemical Contaminants
 US - California Proposition 65 - Carcinogens
 US - Hawaii Air Contaminant Limits
 US - Idaho - Limits for Air Contaminants
 US - Idaho Toxic Air Pollutants Non- Carcinogenic Increments - Occupational Exposure Limits
 US - Michigan Exposure Limits for Air Contaminants
 US - Minnesota Permissible Exposure Limits (PELs)
 US - Oregon Permissible Exposure Limits (Z-1)
 US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants

US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminants
 US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air Contaminants
 US - Washington Permissible exposure limits of air contaminants
 US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants
 US ACGIH Threshold Limit Values (Spanish)
 US ACGIH Threshold Limit Values (TLV)
 US AIHA Workplace Environmental Exposure Levels (WEELs)
 US DOE Temporary Emergency Exposure Limits (TEELs)
 US NIOSH Recommended Exposure Limits (RELs)
 US NIOSH Recommended Exposure Limits (RELs) (Spanish)
 US OSHA Permissible Exposure Levels (PELs) - Table Z1
 US OSHA Permissible Exposure Limits - Annotated Table Z-1 (Spanish)
 US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory
 US TSCA Chemical Substance Inventory - Interim List of Active Substances

Federal Regulations**Superfund Amendments and Reauthorization Act of 1986 (SARA)****SECTION 311/312 HAZARD CATEGORIES**

Flammable (Gases, Aerosols, Liquids, or Solids)	No
Gas under pressure	No
Explosive	No
Self-heating	No
Pyrophoric (Liquid or Solid)	No
Pyrophoric Gas	No
Corrosive to metal	No
Oxidizer (Liquid, Solid or Gas)	No
Organic Peroxide	No
Self-reactive	No
In contact with water emits flammable gas	No
Combustible Dust	No
Carcinogenicity	Yes
Acute toxicity (any route of exposure)	Yes
Reproductive toxicity	No
Skin Corrosion or Irritation	No
Respiratory or Skin Sensitization	Yes
Serious eye damage or eye irritation	Yes
Specific target organ toxicity (single or repeated exposure)	Yes
Aspiration Hazard	No
Germ cell mutagenicity	No
Simple Asphyxiant	No
Hazards Not Otherwise Classified	No

US. EPA CERCLA HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES (40 CFR 302.4)

None Reported

State Regulations**US. CALIFORNIA PROPOSITION 65**

Continued...

Fiberlock IAQ 8500 Duct Sealer Black 8385

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm

US - CALIFORNIA PROPOSITION 65 - CARCINOGENS: LISTED SUBSTANCE

Chlorothalonil, Carbon black (airborne, unbound particles of respirable size) Listed

National Inventory Status

National Inventory	Status
Australia - AICS	No (2-(methylamino)-2-methyl-1-propanol)
Canada - DSL	No (2-(methylamino)-2-methyl-1-propanol)
Canada - NDSL	No (chlorothalonil; monoisobutanolamine; kaolin; propylene glycol; silica crystalline - quartz; 2-(methylamino)-2-methyl-1-propanol; potassium pyrophosphate; carbon black; azadioxabicyclooctane, isomer 1)
China - IECSC	Yes
Europe - EINEC / ELINCS / NLP	No (2-(methylamino)-2-methyl-1-propanol)
Japan - ENCS	No (kaolin; potassium pyrophosphate; azadioxabicyclooctane, isomer 1)
Korea - KECI	No (2-(methylamino)-2-methyl-1-propanol)
New Zealand - NZIoC	Yes
Philippines - PICCS	Yes
USA - TSCA	No (2-(methylamino)-2-methyl-1-propanol)
Taiwan - TCSI	Yes
Mexico - INSQ	No (2-(methylamino)-2-methyl-1-propanol; potassium pyrophosphate)
Vietnam - NCI	Yes
Russia - ARIPS	No (chlorothalonil; 2-(methylamino)-2-methyl-1-propanol)
Legend:	Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory and are not exempt from listing (see specific ingredients in brackets)

SECTION 16 OTHER INFORMATION

Revision Date	02/03/2020
Initial Date	05/02/2017

CONTACT POINT

PLEASE NOTE THAT TITANIUM DIOXIDE IS NOT PRESENT IN CLEAR OR NEUTRAL BASES

SDS Version Summary

Version	Issue Date	Sections Updated
5.8.1.1.1	02/03/2020	Ingredients

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings.

Definitions and abbreviations

PC—TWA: Permissible Concentration-Time Weighted Average
 PC—STEL: Permissible Concentration-Short Term Exposure Limit
 IARC: International Agency for Research on Cancer
 ACGIH: American Conference of Governmental Industrial Hygienists
 STEL: Short Term Exposure Limit
 TEEL: Temporary Emergency Exposure Limit.
 IDLH: Immediately Dangerous to Life or Health Concentrations
 OSF: Odour Safety Factor
 NOAEL :No Observed Adverse Effect Level
 LOAEL: Lowest Observed Adverse Effect Level
 TLV: Threshold Limit Value
 LOD: Limit Of Detection
 OTV: Odour Threshold Value
 BCF: BioConcentration Factors
 BEI: Biological Exposure Index

Powered by AuthorITe, from Chemwatch.

ISSUE DATE: 1/15/1993

REVISION DATE: 4/15/2015

1. PRODUCT AND COMPANY IDENTIFICATION**GHS PRODUCT IDENTIFIER:**

TRADE NAME; CHEMSAFE 800W/TSP

OTHER MEANS OF IDENTIFICATION:**RECOMMENDED USE OF THE CHEMICAL AND RESTRICTIONS ON USE:**

RECOMMENDED USE: CLEANING COMPOUND

SUPPLIER'S DETAILS:

1480 GRANDVIEW AVE.
THOROFARE, NJ 08086
(800)767-6933

EMERGENCY PHONE NUMBER:

COMPANY PHONE NUMBER: (800)767-6933

(24HR) EMERGENCY NUMBER: CHEM-TREC (800)424-9300

2. HAZARD IDENTIFICATION**GHS CLASSIFICATION:**

GHS CLASSIFICATION SCALE: (1=SEVERE HAZARD, 4=SLIGHT HAZARD)

PHYSICAL HAZARDS:

None listed

HEALTH HAZARDS:

SKIN IRRITATION

SERIOUS EYE DAMAGE / IRRITATION

CATEGORY 2 (concentrate form)

CATEGORY 2 (concentrate form)

LABEL ELEMENTS:

SIGNAL WORD: WARNING

HAZARD STATEMENTS:

Causes skin irritation

Causes serious eye irritation

HAZARD SYMBOLS:**PRECAUTIONARY STATEMENTS:**

Keep out of reach of children.

Wash hands, face and all exposed skin areas after handling.

Wear protective gloves/protective clothing/eye protection/face protection

PRECAUTIONARY STATEMENTS (RESPONSE):

IF ON SKIN: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs, get medical advice/attention.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

IN CASE OF FIRE: Use media suitable for surrounding fire.

PRECAUTIONARY STATEMENTS (STORAGE):

No special precautions listed in GHS

PRECAUTIONARY STATEMENTS (DISPOSAL):

No special directive in GHS

OTHER HAZARDS:

Repeated or prolonged exposure can cause skin dryness or cracking.

3. COMPOSITION INFORMATION ON INGREDIENTS

INGREDIENT IDENTITY	CAS NUMBER	PERCENTAGE
TRISODIUM PHOSPHATE	10101-89-0	PROPRIETARY

REMAINING INGREDIENTS ARE NOT REPORTABLE UNDER OSHA/SDS GUIDELINES. THE EXACT PERCENTAGES OF SOME INGREDIENTS HAVE BEEN WITHHELD AS (CBI) CONFIDENTIAL BUSINESS INFORMATION TRADE SECRET.

4. FIRST AID MEASURES

INGESTION: If swallowed, drink copious amounts of water to dilute. Do not induce vomiting unless told to do so by doctor or physician. Seek medical advice/attention. If spontaneous vomiting occurs, keep head below hips to prevent aspiration of liquid into the lung. Never give anything by mouth to an unconscious person.

SKIN CONTACT: Remove contaminated clothing. Wash with soap and plenty of water for 15 minutes. Wash contaminated clothing before reuse. If irritation occurs get medical advice.

INHALATION: Move individual away from exposure and into fresh air. If breathing is irregular or stopped, administer artificial respiration. In case of shortness of breath, give oxygen. Call a physician if you feel unwell.

EYE CONTACT: Rinse cautiously with water for several minutes. Remove contact lenses if easy to do. Continue rinsing. If irritation persists get medical attention/advice.

Most Important Symptoms and Effects, Acute and Delayed

INGESTION: Symptoms may include diarrhea, gastric pain, and vomiting.

SKIN CONTACT: Symptoms may include redness, dryness and cracking of skin.

INHALATION: Symptoms may include irritation of respiratory tract

EYE CONTACT: Symptoms may include stinging, tearing, redness and blurred vision.

Indication of immediate medical attention and special treatment needed, if necessary.

Treat Symptomatically.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media: Use methods suitable for surrounding fire
Unsuitable extinguishing media- Not flammable.

Specific hazards arising from the chemical: No further relevant information available.

Hazardous thermal decomposition products: carbon monoxide and CO₂

Special protective actions for fire-fighters: Keep product containers and surrounding areas cool with water spray. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters: Fire fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders: If specialized clothing is required to deal with the spillage, take note of information in section 8 for further information. See also information in non-emergency personnel above.

Environmental precautions: Avoid dispersal of spilled material with waterways, drains and sewers. See section 12 for additional ecological information.

Methods and materials for containment and cleaning up.

Small spill: Stop leak if without risk. Move containers from the spill area. Absorb with an inert dry material such as diatomaceous earth or vermiculite and place in an appropriate waste disposal container. Mop any remaining residues with soap and water and dispose of wastes via a licensed waste disposal contractor according to federal, state and local regulations.

Large spill: Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, drains, water courses and confined areas. Wash spillages into an effluent treatment plant or absorb with an inert dry material such as diatomaceous earth or vermiculite and place in a appropriate waste disposal containers. Mop any remaining residues with soap and water and dispose of wastes via a licensed waste disposal contractor according to federal, state and local regulations.

7. HANDLING AND STORAGE

Precautions for Safe Handling:

Safe Handling Advice: Utilize appropriate personal protective equipment when handling product. Do not swallow. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mists. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep tightly closed when not in use. Wash face, hands and any exposed skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection and face protection during use.

Advice on general occupational hygiene: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also section 8 for additional hygiene information.

Conditions for safe storage including any incompatibilities:

Store in a dry, well ventilated area away from strong oxidizing agents (see section 10) and food and drink. Keep container tightly closed when not in use. Do not store in unlabeled containers. Keep away from children.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Control Parameters

Occupational Exposure Limits

<u>Ingredient Identity</u>	<u>ACGIH TLV</u>	<u>OSHA PEL</u>	<u>NIOSH IDLH</u>
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Trisodium phosphate	5mg/m ³ USA. Workplace Environmental Exposure Levels (WEEL)		
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Appropriate Engineering Controls

Engineering Controls: Use with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants and maintain air concentrations below occupational exposure standards.

Individual protection measures, such as personal protective equipment. (PPE)

Eye/Face Protection: Wear approved tightly sealed safety goggles

Skin & Body Protection: Wear chemical resistant, impervious gloves at all times when handling chemical products. Check during use that gloves are still retaining their impervious properties, as the time for breakthrough can change from different manufacturers and chemical mixtures cannot always be accurately measured. Appropriate footwear and suitable protective clothing should be worn for the degree and risk of exposure.

Respiratory Protection: If workplace exposure limits of product or any component is exceeded, utilize proper respiratory protection program guidelines (see OSHA 1910.134 and American National Standard ANSI Z88.2) Use a properly fitted NIOSH/MSHA air-purifying or air-fed respirator in compliance with the above mentioned standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: green colored liquid
Odor: mild
Odor threshold: not available
pH: 10.5-11.1
Melting Point/Freezing Point: Not Determined
Initial Boiling Point/Range: Not Determined
Flash Pt: Not Applicable
Evaporation Rate: Not Determined (butyl acetate=1)
Lower explosive limits: Not Applicable
Upper explosive limits: Not Applicable
Vapor Pressure: Not Determined
Vapor Density: Not Determined (air=1)
Relative Density: 1.02
Solubility in water: Soluble
Partition coefficient: not applicable
Auto ignition temp: not applicable
Decomposition Temp: not available
Viscosity: water thin

10. STABILITY AND REACTIVITY

Reactivity: Stable in normal ambient temperature and pressure

Chemical Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: not under normal conditions of storage and use.

Conditions to Avoid: No further relevant information available.

Incompatible Materials: Oxidizing materials

Hazardous Decomposition Products: Carbon monoxide and Carbon Dioxide

11. TOXICOLOGICAL INFORMATION

Acute toxicity: not classified,

Skin corrosion irritation: classified, Category 2, Trisodium Phosphate 10101-89-0

Serious eye damage: classified, Category 2, Trisodium Phosphate 10101-89-0

Sensitization: Not classified

Mutagenicity: Not classified

Carcinogenicity: Not classified

Reproductive Toxicity: Not Classified

Teratogenicity: Not Available

Specific target Organ Toxicity (single exposure):

Not classified

Specific target Organ Toxicity (repeated exposure)

Not Classified

Aspiration Hazard: Not classified

Information on the likely routes of exposure:

Ingestion: May be harmful if swallowed

Inhalation: Not expected

Skin: Causes skin irritation

Eye: Causes serious eye irritation

Symptoms related to the physical, chemical and toxicological characteristics

Ingestion: See section iv, most important symptoms and effects, acute and delayed.

Inhalation: See section iv, most important symptoms and effects, acute and delayed.

Skin: See section iv, most important symptoms and effects, acute and delayed.

Eye: See section iv, most important symptoms and effects, acute and delayed.

Delayed and immediate effects and also chronic effects from short and long term exposure.

General: Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis

Carcinogenicity: no known significant effects or critical hazards. Not classifiable.

Numerical measures of Toxicity

Not Available

12. ECOLOGICAL INFORMATION

Toxicity:	Ingredient name	Result	Species	Exposure
	Trisodium Phosphate	2,400mg/l	(Golden orfe)	48h

Persistence and degradability:

No data

Bioaccumulation Potential:

No data

Mobility in Soil:

No data

Other adverse Effects:

No further information.

13. DISPOSAL CONSIDERATIONS

Dispose in accordance with applicable federal, state and local regulations.

14. TRANSPORTATION INFORMATION

DOT: NOT REGULATED
IATA: NOT REGULATED
IMDG: NOT REGULATED

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS: All ingredients are listed or exempted with TSCA.

SARA 302/304: no products were found.

SARA 311/312: acute health hazard: yes

Ingredient	%	FIRE HAZARD	PRESSURE RELEASE	REACTIVE	IMMEDIATE ACUTE	DELAYED CHRONIC
Trisodium Phosphate	PROPRIETARY				YES	

SARA 313: none found above de minimis levels

STATE REGULATIONS:

Ingredient	New York	New Jersey	Massachusetts	Pennsylvania
Trisodium Phosphate	No	Yes	Yes	Yes

California Prop 65: none known to meet requirements

16. OTHER INFORMATION

HMIS RATING: HEALTH (1) FIRE (0) REACTIVITY (0) PP-B
4=EXTREME, 3=HIGH, 2=MODERATE, 1=SLIGHT, 0=INSIGNIFICANT

NOTICE TO READER:

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. The information on this sds was obtained from sources which we believe are reliable. However, the information is provided without any warranty, expressed or implied, regarding its correctness. Users are advised to confirm in advance of need, that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the sds. /furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed.

SAFETY DATA SHEET

Version 6.6
Revision Date 05/24/2022
Print Date 08/27/2022

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifiers**

Product name : Acetone
Product Number : 179124
Brand : SIGALD
Index-No. : 606-001-00-8
CAS-No. : 67-64-1

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Inc.
3050 SPRUCE ST
ST. LOUIS MO 63103
UNITED STATES
Telephone : +1 314 771-5765
Fax : +1 800 325-5052

1.4 Emergency telephone

Emergency Phone # : 800-424-9300 CHEMTREC (USA) +1-703-527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/week

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture****GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

Flammable liquids (Category 2), H225
Eye irritation (Category 2A), H319
Specific target organ toxicity - single exposure (Category 3), Central nervous system, H336
For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word

Danger

Hazard statement(s)	
H225	Highly flammable liquid and vapor.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
Precautionary statement(s)	
P210	Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ ventilating/ lighting/ equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P261	Avoid breathing mist or vapors.
P264	Wash skin thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/ eye protection/ face protection.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304 + P340 + P312	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313	If eye irritation persists: Get medical advice/ attention.
P370 + P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P403 + P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Repeated exposure may cause skin dryness or cracking.

SECTION 3: Composition/information on ingredients

3.1 Substances

Formula	: C ₃ H ₆ O
Molecular weight	: 58.08 g/mol
CAS-No.	: 67-64-1
EC-No.	: 200-662-2
Index-No.	: 606-001-00-8

Component	Classification	Concentration
acetone	Flam. Liq. 2; Eye Irrit. 2A; STOT SE 3; H225, H319, H336 Concentration limits: >= 20 %: STOT SE 3, H336;	<= 100 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

Show this material safety data sheet to the doctor in attendance.

If inhaled

After inhalation: fresh air. Call in physician.

In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

In case of eye contact

After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

If swallowed

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO₂) Foam Dry powder

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Carbon oxides

Combustible.

Pay attention to flashback.

Vapors are heavier than air and may spread along floors.

Development of hazardous combustion gases or vapours possible in the event of fire.

Forms explosive mixtures with air at ambient temperatures.

5.3 Advice for firefighters

In the event of fire, wear self-contained breathing apparatus.

5.4 Further information

Remove container from danger zone and cool with water. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains. Risk of explosion.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent material (e.g. Chemisorb®). Dispose of properly. Clean up affected area.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

Advice on protection against fire and explosion

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

Hygiene measures

Change contaminated clothing. Preventive skin protection recommended. Wash hands after working with substance. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition.

Storage class

Storage class (TRGS 510): 3: Flammable liquids

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with workplace control parameters

Component	CAS-No.	Value	Control parameters	Basis
acetone	67-64-1	TWA	250 ppm	USA. ACGIH Threshold Limit Values (TLV)
	Remarks	Not classifiable as a human carcinogen		
		STEL	500 ppm	USA. ACGIH Threshold Limit Values (TLV)
		Not classifiable as a human carcinogen		
		TWA	250 ppm 590 mg/m ³	USA. NIOSH Recommended Exposure Limits
		TWA	1,000 ppm 2,400 mg/m ³	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
		C	3,000 ppm	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
		PEL	500 ppm 1,200 mg/m ³	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
		STEL	750 ppm 1,780 mg/m ³	California permissible exposure limits for chemical contaminants (Title 8, Article 107)

Biological occupational exposure limits

Component	CAS-No.	Parameters	Value	Biological specimen	Basis
acetone	67-64-1	Acetone	25 mg/l	Urine	ACGIH - Biological Exposure Indices (BEI)
	Remarks	End of shift (As soon as possible after exposure ceases)			

Predicted No Effect Concentration (PNEC)

Compartment	Value
Soil	33.3 mg/kg
Sea water	1.06 mg/l
Fresh water	10.6 mg/l
Sea sediment	3.04 mg/kg
Fresh water sediment	30.4 mg/kg
Onsite sewage treatment plant	100 mg/l

8.2 Exposure controls

Appropriate engineering controls

Change contaminated clothing. Preventive skin protection recommended. Wash hands after working with substance.

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

Skin protection

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Full contact

Material: butyl-rubber

Minimum layer thickness: 0.7 mm

Break through time: 480 min

Material tested: Butoject® (KCL 898)

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Splash contact

Material: Latex gloves

Minimum layer thickness: 0.6 mm

Break through time: 10 min

Material tested: Lapren® (KCL 706 / Aldrich Z677558, Size M)

Body Protection

Flame retardant antistatic protective clothing.

Respiratory protection

required when vapours/aerosols are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Control of environmental exposure

Do not let product enter drains. Risk of explosion.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- | | |
|--|--|
| a) Appearance | Form: clear, liquid
Color: colorless |
| b) Odor | pungent, weakly aromatic |
| c) Odor Threshold | 0.1 ppm |
| d) pH | 5 - 6 at 395 g/l at 20 °C (68 °F) |
| e) Melting point/freezing point | Melting point/range: -94 °C (-137 °F) - lit. |
| f) Initial boiling point and boiling range | 56 °C 133 °F at 1,013 hPa - lit. |
| g) Flash point | -17.0 °C (1.4 °F) - closed cup |
| h) Evaporation rate | No data available |
| i) Flammability (solid, | No data available |

	gas)	
j)	Upper/lower flammability or explosive limits	Upper explosion limit: 13 %(V) Lower explosion limit: 2 %(V)
k)	Vapor pressure	245.3 hPa at 20.0 °C (68.0 °F)
l)	Vapor density	No data available
m)	Density	0.791 g/cm ³ at 25 °C (77 °F) - lit.
	Relative density	No data available
n)	Water solubility	soluble, in all proportions
o)	Partition coefficient: n-octanol/water	No data available
p)	Autoignition temperature	465.0 °C (869.0 °F)
q)	Decomposition temperature	Distillable in an undecomposed state at normal pressure.
r)	Viscosity	No data available
s)	Explosive properties	No data available
t)	Oxidizing properties	none

9.2 Other safety information

Conductivity	0.01 µS/cm at 20 °C (68 °F)
Surface tension	23.2 mN/m at 20.0 °C (68.0 °F)

SECTION 10: Stability and reactivity

10.1 Reactivity

Vapors may form explosive mixture with air.

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

10.3 Possibility of hazardous reactions

Risk of ignition or formation of inflammable gases or vapours with:

chromosulfuric acid

chromyl chloride

ethanolamine

Fluorine

Strong oxidizing agents

strong reducing agents

Nitric acid

chromium(VI) oxide

Risk of explosion with:

nonmetallic oxyhalides

halogen-halogen compounds

Chloroform

nitrating acid

nitrosyl compounds

hydrogen peroxide
halogen oxides
organic nitro compounds
peroxi compounds
Exothermic reaction with:
Bromine
Alkali metals
alkali hydroxides
Halogenated hydrocarbon
Sulfur dichloride
phosphorous oxichloride

10.4 Conditions to avoid

Warming.

10.5 Incompatible materials

rubber, various plastics

10.6 Hazardous decomposition products

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - female - 5,800 mg/kg

Remarks: (ECHA)

LC50 Inhalation - Rat - 4 h - 76 mg/l - vapor

Remarks: Unconsciousness

Drowsiness

Dizziness

(External MSDS)

LD50 Dermal - Rabbit - 20,000 mg/kg

Remarks: (IUCLID)

No data available

Skin corrosion/irritation

Skin - Rabbit

Result: Mild skin irritation - 24 h

(Draize Test)

Remarks: (RTECS)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: Eye irritation - 24 h

(Draize Test)

Remarks: (RTECS)

Respiratory or skin sensitization

Maximization Test - Guinea pig

Result: Not a skin sensitizer.

Remarks: (ECHA)

Chronic exposure may cause dermatitis.

Germ cell mutagenicity

Test Type: Mutagenicity (mammal cell test): chromosome aberration.

Test system: Chinese hamster ovary cells

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 473

Result: negative

Test Type: Ames test

Test system: Salmonella typhimurium

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

Test Type: In vitro mammalian cell gene mutation test

Test system: Mouse lymphoma test

Metabolic activation: without metabolic activation

Method: OECD Test Guideline 476

Result: negative

Carcinogenicity

IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

Inhalation - May cause drowsiness or dizziness. - Narcotic effects

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

11.2 Additional Information

RTECS: AL3150000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

After absorption:

Headache

Salivation

Nausea

Vomiting

Dizziness

narcosis

Coma

Other dangerous properties can not be excluded.

Handle in accordance with good industrial hygiene and safety practice.

Kidney - Irregularities - Based on Human Evidence

Skin - Dermatitis - Based on Human Evidence

Kidney - Irregularities - Based on Human Evidence

Skin - Dermatitis - Based on Human Evidence

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish	flow-through test LC50 - Pimephales promelas (fathead minnow) - 6,210 mg/l - 96 h (OECD Test Guideline 203)
Toxicity to daphnia and other aquatic invertebrates	static test LC50 - Daphnia pulex (Water flea) - 8,800 mg/l - 48 h Remarks: (ECHA)
Toxicity to algae	static test NOEC - M.aeruginosa - 530 mg/l - 8 d (DIN 38412) Remarks: (maximum permissible toxic concentration) (IUCLID)
Toxicity to bacteria	static test EC50 - activated sludge - 61.15 mg/l - 30 min (OECD Test Guideline 209)

12.2 Persistence and degradability

Biodegradability	aerobic - Exposure time 28 d Result: 91 % - Readily biodegradable. (OECD Test Guideline 301B)
Biochemical Oxygen Demand (BOD)	1,850 mg/g Remarks: (IUCLID)
Chemical Oxygen Demand (COD)	2,070 mg/g Remarks: (IUCLID)
Theoretical oxygen demand	2,200 mg/g Remarks: (Lit.)

12.3 Bioaccumulative potential

Does not bioaccumulate.

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Endocrine disrupting properties

No data available

12.7 Other adverse effects

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself. See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

SECTION 14: Transport information

DOT (US)

UN number: 1090 Class: 3 Packing group: II
Proper shipping name: Acetone
Reportable Quantity (RQ): 5000 lbs
Poison Inhalation Hazard: No

IMDG

UN number: 1090 Class: 3 Packing group: II EMS-No: F-E, S-D
Proper shipping name: ACETONE

IATA

UN number: 1090 Class: 3 Packing group: II
Proper shipping name: Acetone

SECTION 15: Regulatory information

SARA 302 Components

This material does not contain any components with a section 302 EHS TPQ.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Fire Hazard, Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

SECTION 16: Other information

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See

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Base Oil and Additives
20206010K510, 584365-00, 97CC38
Hydraulic fluid

22777 Springwoods Village Parkway
Spring, TX. 77389 USA

609-737-4411

800-424-9300 or 703-527-3887 CHEMTREC

800-662-4525

<http://www.exxon.com>, <http://www.mobil.com>

This material is not hazardous according to regulatory guidelines (see (M)SDS Section 15).

None as defined under 29 CFR 1910.1200.

No significant hazards.

High-pressure injection under skin may cause serious damage. Excessive exposure may result in eye, skin, or respiratory irritation.

No significant hazards.

Health:	0	Flammability:	1	Reactivity:	0
Health:	0	Flammability:	1	Reactivity:	0

This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.

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[Redacted]

This material is defined as a mixture.

HYDROTREATED LIGHT NAPHTHENIC DISTILLATE (PETROLEUM)	64742-53-6	20 - < 30%	H304
NAPHTHALENESULFONIC ACID, DINONYL-, CALCIUM SALT	57855-77-3	0.1 - < 1%	H315, H318, H317
ZINC ALKYL DITHIOPHOSPHATE	68649-42-3	1 - 2.5%	H319(2A), H401, H411

* All concentrations are percent by weight unless material is a gas. Gas concentrations are in percent by volume.

As per paragraph (i) of 29 CFR 1910.1200, formulation is considered a trade secret and specific chemical identity and exact percentage (concentration) of composition may have been withheld. Specific chemical identity and exact percentage composition will be provided to health professionals, employees, or designated representatives in accordance with applicable provisions of paragraph (i).

[Redacted]

Remove from further exposure. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, assist ventilation with a mechanical device or use mouth-to-mouth resuscitation.

Wash contact areas with soap and water. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

Flush thoroughly with water. If irritation occurs, get medical assistance.

First aid is normally not required. Seek medical attention if discomfort occurs.

[Redacted]

flames.

Use water fog, foam, dry chemical or carbon dioxide (CO₂) to extinguish

Straight Streams of Water

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Evacuate area. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply. Firefighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed surfaces and to protect personnel.

Pressurized mists may form a flammable mixture.

Smoke, Fume, Sulfur oxides, Aldehydes, Oxides of carbon, Incomplete combustion products

>166°C (331°F) [ASTM D-92]

LEL: 0.9 UEL: 7.0

N/D

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations. US regulations require reporting releases of this material to the environment which exceed the applicable reportable quantity or oil spills which could reach any waterway including intermittent dry creeks. The National Response Center can be reached at (800)424-8802.

Avoid contact with spilled material. See Section 5 for fire fighting information. See the Hazard Identification Section for Significant Hazards. See Section 4 for First Aid Advice. See Section 8 for advice on the minimum requirements for personal protective equipment. Additional protective measures may be necessary, depending on the specific circumstances and/or the expert judgment of the emergency responders.

For emergency responders: Respiratory protection: respiratory protection will be necessary only in special cases, e.g., formation of mists. Half-face or full-face respirator with filter(s) for dust/organic vapor or Self Contained Breathing Apparatus (SCBA) can be used depending on the size of spill and potential level of exposure. If the exposure cannot be completely characterized or an oxygen deficient atmosphere is possible or anticipated, SCBA is recommended. Work gloves that are resistant to hydrocarbons are recommended. Gloves made of polyvinyl acetate (PVA) are not water-resistant and are not suitable for emergency use. Chemical goggles are recommended if splashes or contact with eyes is possible. Small spills: normal antistatic work clothes are usually adequate. Large spills: full body suit of chemical resistant, antistatic material is recommended.

Stop leak if you can do it without risk. Recover by pumping or with suitable absorbent.

Stop leak if you can do it without risk. Confine the spill immediately with booms. Warn other shipping. Remove from the surface by skimming or with suitable absorbents. Seek the advice of a specialist before using dispersants.

Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be

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consulted. Note: Local regulations may prescribe or limit action to be taken.

Large Spills: Dike far ahead of liquid spill for later recovery and disposal. Prevent entry into waterways, sewers, basements or confined areas.



Prevent small spills and leakage to avoid slip hazard. Material can accumulate static charges which may cause an electrical spark (ignition source). When the material is handled in bulk, an electrical spark could ignite any flammable vapors from liquids or residues that may be present (e.g., during switch-loading operations). Use proper bonding and/or ground procedures. However, bonding and grounds may not eliminate the hazard from static accumulation. Consult local applicable standards for guidance. Additional references include American Petroleum Institute 2003 (Protection Against Ignitions Arising out of Static, Lightning and Stray Currents) or National Fire Protection Agency 77 (Recommended Practice on Static Electricity) or CENELEC CLC/TR 50404 (Electrostatics - Code of practice for the avoidance of hazards due to static electricity).

This material is a static accumulator.

The container choice, for example storage vessel, may effect static accumulation and dissipation. Do not store in open or unlabelled containers. Keep away from incompatible materials.



HYDROTREATED LIGHT NAPHTHENIC DISTILLATE (PETROLEUM)	Mist.	TWA	5 mg/m ³		N/A	OSHA Z1
HYDROTREATED LIGHT NAPHTHENIC DISTILLATE (PETROLEUM)	Inhalable fraction.	TWA	5 mg/m ³		N/A	ACGIH
HYDROTREATED LIGHT NAPHTHENIC DISTILLATE (PETROLEUM)	Mist.	TWA	5 mg/m ³		N/A	ACGIH

When mists/aerosols can occur the following are recommended: 5 mg/m³ - ACGIH TLV (inhalable fraction), 5 mg/m³ - OSHA PEL.

NOTE: Limits/standards shown for guidance only. Follow applicable regulations.

No biological limits allocated.

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The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Control measures to consider:

No special requirements under ordinary conditions of use and with adequate ventilation.

Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.

If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Respirator selection, use, and maintenance must be in accordance with regulatory requirements, if applicable. Types of respirators to be considered for this material include:

No special requirements under ordinary conditions of use and with adequate ventilation.

For high airborne concentrations, use an approved supplied-air respirator, operated in positive pressure mode. Supplied air respirators with an escape bottle may be appropriate when oxygen levels are inadequate, gas/vapor warning properties are poor, or if air purifying filter capacity/rating may be exceeded.

Any specific glove information provided is based on published literature and glove manufacturer data. Glove suitability and breakthrough time will differ depending on the specific use conditions. Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions. Inspect and replace worn or damaged gloves. The types of gloves to be considered for this material include:

No protection is ordinarily required under normal conditions of use.

If contact is likely, safety glasses with side shields are recommended.

Any specific clothing information provided is based on published literature or manufacturer data. The types of clothing to be considered for this material include:

No skin protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid skin contact.

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

Comply with applicable environmental regulations limiting discharge to air, water and soil. Protect the environment by applying appropriate control measures to prevent or limit emissions.

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Liquid
Amber
Characteristic
N/D

0.879 [ASTM D4052]
N/A
>166°C (331°F) [ASTM D-92] LEL: 0.9 UEL: 7.0

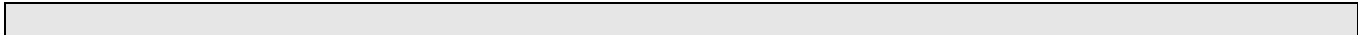
N/D
> 316°C (600°F)
N/D
> 2 at 101 kPa
< 0.013 kPa (0.1 mm Hg) at 20 °C
N/D

N/A

> 3.5

Negligible
46 cSt (46 mm²/sec) at 40 °C | 7.8 cSt (7.8 mm²/sec) at 100°C [ASTM D 445]
See Hazards Identification Section.

N/D
N/A
-36°C (-33°F) [ASTM D97]
< 3 %wt



See sub-sections below.

Material is stable under normal conditions.

Excessive heat.

Strong oxidizers

Material does not decompose at ambient temperatures.

Hazardous polymerization will not occur.



Acute Toxicity: No end point data for material.	Minimally Toxic. Based on assessment of the components.
Irritation: No end point data for material.	Negligible hazard at ambient/normal handling temperatures.

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Acute Toxicity: No end point data for material.	Minimally Toxic. Based on assessment of the components.
Acute Toxicity: No end point data for material.	Minimally Toxic. Based on assessment of the components.
Skin Corrosion/Irritation: No end point data for material.	Negligible irritation to skin at ambient temperatures. Based on assessment of the components.
Serious Eye Damage/Irritation: No end point data for material.	May cause mild, short-lasting discomfort to eyes. Based on assessment of the components.
Respiratory Sensitization: No end point data for material.	Not expected to be a respiratory sensitizer.
Skin Sensitization: No end point data for material.	Not expected to be a skin sensitizer. Based on assessment of the components.
Data available.	Not expected to be an aspiration hazard. Based on physico-chemical properties of the material.
No end point data for material.	Not expected to be a germ cell mutagen. Based on assessment of the components.
No end point data for material.	Not expected to cause cancer. Based on assessment of the components.
No end point data for material.	Not expected to be a reproductive toxicant. Based on assessment of the components.
No end point data for material.	Not expected to cause harm to breast-fed children.
Single Exposure: No end point data for material.	Not expected to cause organ damage from a single exposure.
Repeated Exposure: No end point data for material.	Not expected to cause organ damage from prolonged or repeated exposure. Based on assessment of the components.

ZINC ALKYL DITHIOPHOSPHATE	Dermal Lethality: LD50 > 2000 mg/kg (Rabbit); Oral Lethality: LD50 > 2000 mg/kg (Rat)
----------------------------	---

Base oil severely refined: Not carcinogenic in animal studies. Representative material passes IP-346, Modified Ames test, and/or other screening tests. Dermal and inhalation studies showed minimal effects; lung non-specific infiltration of immune cells, oil deposition and minimal granuloma formation. Not sensitizing in test animals.

None.

--REGULATORY LISTS SEARCHED--

1 = NTP CARC
2 = NTP SUS

3 = IARC 1
4 = IARC 2A

5 = IARC 2B
6 = OSHA CARC

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The information given is based on data available for the material, the components of the material, and similar materials.

Material -- Not expected to be harmful to aquatic organisms.

Base oil component -- Low solubility and floats and is expected to migrate from water to the land. Expected to partition to sediment and wastewater solids.

Base oil component -- Expected to be inherently biodegradable

Base oil component -- Has the potential to bioaccumulate, however metabolism or physical properties may reduce the bioconcentration or limit bioavailability.

Disposal recommendations based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

Product is suitable for burning in an enclosed controlled burner for fuel value or disposal by supervised incineration at very high temperatures to prevent formation of undesirable combustion products. Protect the environment. Dispose of used oil at designated sites. Minimize skin contact. Do not mix used oils with solvents, brake fluids or coolants.

RCRA Information: The unused product, in our opinion, is not specifically listed by the EPA as a hazardous waste (40 CFR, Part 261D), nor is it formulated to contain materials which are listed as hazardous wastes. It does not exhibit the hazardous characteristics of ignitability, corrosivity or reactivity and is not formulated with contaminants as determined by the Toxicity Characteristic Leaching Procedure (TCLP). However, used product may be regulated.

Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. DO NOT PRESSURISE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION.

Product Name: BOBCAT HYDRAULIC OIL 15 SPECIAL

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THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.



Not Regulated for Land Transport

Not Regulated for Land Transport

Not Regulated for Sea Transport according to IMDG-Code

No

Not Regulated for Air Transport



OSHA HazCom 2012, 29 CFR 1910.1200. This material is not considered hazardous in accordance with

KECI, PICCS, TSCA AICS, DSL, ENCS, IECSC,

This material contains no extremely hazardous substances.

None.

ZINC ALKYL DITHIOPHOSPHATE	68649-42-3	1 - 2.5%
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HYDROTREATED LIGHT NAPHTHENIC DISTILLATE (PETROLEUM)	64742-53-6	1, 4, 13, 17, 18
ZINC ALKYL DITHIOPHOSPHATE	68649-42-3	13, 15, 17, 19

Product Name: BOBCAT HYDRAULIC OIL 15 SPECIAL

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--REGULATORY LISTS SEARCHED--

1 = ACGIH ALL	6 = TSCA 5a2	11 = CA P65 REPRO	16 = MN RTK
2 = ACGIH A1	7 = TSCA 5e	12 = CA RTK	17 = NJ RTK
3 = ACGIH A2	8 = TSCA 6	13 = IL RTK	18 = PA RTK
4 = OSHA Z	9 = TSCA 12b	14 = LA RTK	19 = RI RTK
5 = TSCA 4	10 = CA P65 CARC	15 = MI 293	

Code key: CARC=Carcinogen; REPRO=Reproductive

N/D = Not determined, N/A = Not applicable

H304: May be fatal if swallowed and enters airways; Aspiration, Cat 1

H315: Causes skin irritation; Skin Corr/Irritation, Cat 2

H317: May cause allergic skin reaction; Skin Sensitization, Cat 1

H318: Causes serious eye damage; Serious Eye Damage/Irr, Cat 1

H319(2A): Causes serious eye irritation; Serious Eye Damage/Irr, Cat 2A

H401: Toxic to aquatic life; Acute Env Tox, Cat 2

H411: Toxic to aquatic life with long lasting effects; Chronic Env Tox, Cat 2

Updates made in accordance with implementation of GHS requirements.

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PPEC: A

DGN: 7123448XUS (1006122)

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Issue Date 21-Aug-2012

Revision Date 3-Mar-2015

Version 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name Smart Strip Pro

Other Means of Identification

SDS # DCI-66

Recommended Use of the Chemical and Restrictions on Use

Recommended Use Paint remover.

Details of the Supplier of the Safety Data Sheet

Supplier Address

Dumond Chemicals, Inc.
83 General Warren Blvd
Suite 190
Malvern, PA 19355

Emergency Telephone Number

Company Phone Number 1-609-655-7700
Emergency Telephone INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Classification

Skin corrosion/irritation

Category 2

Signal Word

Warning

Hazard Statements

Causes skin irritation



Appearance White paste

Physical State Paste

Odor Slight characteristic odor

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

IF ON SKIN: Wash with plenty of soap and water
 If skin irritation occurs: Get medical advice/attention
 Take off contaminated clothing and wash before reuse

Hazards Not Otherwise Classified (HNOC)

May be harmful if swallowed
 May be harmful in contact with skin

Other Hazards

Toxic to aquatic life with long lasting effects
 Toxic to aquatic life

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Water	7732-18-5	40-60
Benzyl alcohol	100-51-6	30-50
Titanium dioxide	13463-67-7	1-5
Formic acid	64-18-6	1-5

4. FIRST AID MEASURES**First Aid Measures**

Inhalation	Remove to fresh air. Oxygen or artificial respiration if needed. Get medical attention if necessary.
Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention if necessary.
Ingestion	If conscious give 2 glasses of water to dilute. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention if necessary.
Skin Contact	Wash thoroughly with soap and water until no traces of the chemical remain. Remove contaminated clothing and shoes. Get medical attention if irritation occurs.

Most Important Symptoms and Effects, both Acute and Delayed

Symptoms	May cause skin and eye irritation. May be harmful if absorbed through the skin. Mists and vapors cause irritation of the eyes, mucous membranes, and upper respiratory tract.
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Indication of any Immediate Medical Attention and Special Treatment Needed

Note to Physicians	Treat symptomatically.
---------------------------	------------------------

5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

Water spray (fog). Foam. Dry chemical or CO₂.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Sealed containers may rupture when heated. At elevated temperatures, vapors may form explosive mixtures with air in confined areas. Decomposition may be hazardous. Cool containers exposed to flames with water until well after the fire is out.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions Wear appropriate protective clothing and equipment to prevent contact.

Environmental Precautions See Section 12 for additional ecological information. Do not allow into any sewer, on the ground or into any body of water.

Methods and Material for Containment and Cleaning Up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up Scoop up and collect with an inert absorbent and place into closable containers for disposal. Wash spill area with plenty of water. Spills and releases may have to be reported to Federal and/or local authorities. See section 15.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Advice on Safe Handling Avoid contact with skin, eyes or clothing. Avoid breathing vapors or mists. Use personal protective equipment as required. Remove Personal Protective Equipment immediately after handling this product. Wash thoroughly after handling before eating, drinking, smoking, or using toilet facilities. Protect container from physical damage. Follow all SDS/label precautions even after container is emptied because it may retain product residues.

Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions Keep in a dry, cool and well-ventilated place. Keep away from oxidizers and incompatible materials.

Incompatible Materials Strong acids. Bases. strong oxidizers and reducing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Titanium dioxide 13463-67-7	TWA: 10 mg/m ³ In Powder Form	TWA: 15 mg/m ³ total dust (vacated) TWA: 10 mg/m ³ total dust	IDLH: 5000 mg/m ³
Formic acid 64-18-6	STEL: 10 ppm TWA: 5 ppm	TWA: 5 ppm TWA: 9 mg/m ³ (vacated) TWA: 5 ppm (vacated) TWA: 9 mg/m ³	IDLH: 30 ppm TWA: 5 ppm TWA: 9 mg/m ³

Appropriate Engineering Controls**Engineering Controls**

For operations where contact can occur, a safety shower and an eye wash facility should be available. Good general room ventilation (equivalent to outdoors) should be adequate under normal conditions.

Individual Protection Measures, such as Personal Protective Equipment**Eye/Face Protection**

Chemical safety goggles/faceshield. Do not wear contact lenses.

Skin and Body Protection

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. Butyl rubber or other impervious gloves are required.

Respiratory Protection

None needed under normal use conditions with adequate ventilation. If the occupational exposure limits are exceeded, a NIOSH approved respirator with acid gas cartridges or supplied air respirator appropriate for the form and concentration of the contaminants should be used. Selection and use of respiratory equipment must be in accordance with OSHA 1910.134 and good industrial hygiene practice.

General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES**Information on Basic Physical and Chemical Properties**

Physical State	Paste	Odor	Slight characteristic odor
Appearance	White paste	Odor threshold	28.2 ppm (formic acid)
Color	White		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	2	
Melting point/freezing point	Not available	
Boiling point/boiling range	Not available	
Flash point	None	
Evaporation rate	Not determined	
Flammability (solid, gas)	Not determined	
Flammability limits in air		
Upper flammability limits	Not available	
Lower flammability limit	Not available	
Vapor pressure	Not determined	
Vapor density	Not determined	
Specific gravity	1.085	
Water solubility	Partially soluble	
Solubility in other solvents	Not determined	
Partition coefficient	Not available	
Autoignition temperature	Not determined	
Decomposition temperature	Not determined	
Kinematic viscosity	Not determined	
Dynamic viscosity	Not determined	
Explosive properties	Not determined	
Oxidizing Properties	Not determined	

Other Information

VOC Content	35.2 g/l
VOC Content (%)	5%
VOC Content	0.5 lbs/gal

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to Avoid

Keep out of reach of children.

Incompatible Materials

Strong acids. Bases. strong oxidizers and reducing agents.

Hazardous Decomposition ProductsCarbon monoxide. Carbon dioxide (CO₂). Nitrogen oxides (NO_x). May oxidize with air to form benzaldehyde and benzoic acid.**11. TOXICOLOGICAL INFORMATION****Information on Likely Routes of Exposure**

Product Information	The product has not been tested
Inhalation	Avoid breathing vapors or mists.
Eye Contact	Avoid contact with eyes.
Skin Contact	May be harmful in contact with skin. Causes skin irritation.
Ingestion	May be harmful if swallowed.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Water 7732-18-5	> 90 mL/kg (Rat)	-	-
Benzyl alcohol 100-51-6	= 1230 mg/kg (Rat)	= 2000 mg/kg (Rabbit)	= 8.8 mg/L (Rat) 4 h
Titanium dioxide 13463-67-7	> 10000 mg/kg (Rat)	-	-
Formic acid 64-18-6	= 730 mg/kg (Rat)	-	-

Information on Physical, Chemical and Toxicological Effects

Symptoms May cause skin and eye irritation. May be harmful if absorbed through the skin. Mists and vapors cause irritation of the eyes, mucous membranes, and upper respiratory tract.

Delayed and Immediate Effects as well as Chronic Effects from Short and Long-term Exposure

Carcinogenicity Titanium dioxide is a possible carcinogen when it appears as a respirable dust.

Chemical Name	ACGIH	IARC	NTP	OSHA
Titanium dioxide 13463-67-7		Group 2B		X

Numerical Measures of Toxicity- Product

Not determined

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral)	2708 mg/kg
ATEmix (dermal)	5000 mg/kg
ATEmix (inhalation-dust/mist)	22 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Benzyl alcohol 100-51-6	35: 3 h Anabaena variabilis mg/L EC50	460: 96 h Pimephales promelas mg/L LC50 static 10: 96 h Lepomis macrochirus mg/L LC50 static	EC50 = 50 mg/L 5 min EC50 = 63.7 mg/L 15 min EC50 = 63.7 mg/L 5 min EC50 = 71.4 mg/L 30 min	23: 48 h water flea mg/L EC50
Formic acid 64-18-6	25: 96 h Desmodemus subspicatus mg/L EC50 26.9: 72 h Desmodemus subspicatus mg/L EC50	175: 24 h Lepomis macrochirus mg/L LC50 static	EC50 = 46.7 mg/L 17 h	120: 48 h Daphnia magna mg/L EC50 138 - 165.6: 48 h Daphnia magna mg/L EC50 Static

Persistence and Degradability

Material is readily biodegradable.

Bioaccumulation

The product has low potential for bioaccumulation.

Mobility

Not determined.

Chemical Name	Partition coefficient
Benzyl alcohol 100-51-6	1.1
Formic acid 64-18-6	-0.54

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Formic acid 64-18-6	U123	Included in waste streams: K009, K010		U123

Chemical Name	California Hazardous Waste Status
Formic acid 64-18-6	Toxic Corrosive

14. TRANSPORT INFORMATION

Note	Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances
<u>DOT</u>	Not regulated
<u>IATA</u>	Not regulated
<u>IMDG</u>	Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA Listed
DSL Listed

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances IECSC

- China Inventory of Existing Chemical Substances KECL -

Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

US Federal Regulations

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Formic acid - 64-18-6	64-18-6	1-5	1.0

SARA 311/312 Hazard Categories

Acute health hazard Yes
Chronic Health Hazard Yes
Fire hazard No
Sudden release of pressure hazard No
Reactive Hazard No

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Formic acid 64-18-6	5000 lb			X
Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)	
Formic acid 64-18-6	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ	

US State Regulations

Chemical Name	California Proposition 65
Titanium dioxide - 13463-67-7	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Benzyl alcohol 100-51-6		X	X
Titanium dioxide 13463-67-7	X	X	X
Formic acid 64-18-6	X	X	X

U.S. EPA Label Information

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazards 2	Flammability 1	Instability 0	Special Hazards Not determined
<u>HMIS</u>	Health Hazards Not determined	Flammability Not determined	Physical Hazards Not determined	Personal Protection Not determined

Issue Date	21-Aug-2012
Revision Date	12-Dec-2012
Revision Note	New format

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

BZ7385 ZEP CHERRY BOMB 095124 4/1G

Version 5.0

Revision Date 08/15/2017

Print Date 01/22/2018

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : BZ7385 ZEP CHERRY BOMB 095124 4/1G

Material number : 00000000001041522

Manufacturer or supplier's details

Company : Zep Inc.

Address : 1310 Seaboard Industrial Blvd., NW
Atlanta, GA 30318

Telephone : 404-352-1680

Emergency telephone numbers
For SDS Information : Compliance Services 1-877-428-9937

For a Medical Emergency : 877-541-2016 Toll Free - All Calls Recorded

For a Transportation Emergency : CHEMTREC: 800-424-9300 - All Calls Recorded.
In the District of Columbia 202-483-7616

Recommended use of the chemical and restrictions on use

Recommended use : Hand Care

SECTION 2. HAZARDS IDENTIFICATION
Emergency Overview

Appearance	viscous, liquid
Colour	red
Odour	like fruit

GHS Classification

Not a hazardous substance or mixture.

GHS label elements

Not a hazardous substance or mixture.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical name	CAS-No.	Concentration [%]
Distillates (petroleum), hydrotreated light	64742-47-8	>= 20 - < 30
4-Nonylphenol branched, ethoxylated	127087-87-0	>= 10 - < 20
2-aminoethanol Tallate	68440-25-5	>= 1 - < 5
White mineral oil (petroleum)	8042-47-5	>= 1 - < 5
Solvent naphtha (petroleum), heavy aliph.	64742-96-7	>= 1 - < 5
Poly(oxy-1,2-ethanediyl), .alpha.-hydro.-omega.-	25322-68-3	>= 1 - < 5

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hydroxy-Ethane-1,2-diol, ethoxylated	
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The exact percentages of disclosed substances are withheld as trade secrets.

SECTION 4. FIRST AID MEASURES

- General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.
- If inhaled : If unconscious place in recovery position and seek medical advice.
If symptoms persist, call a physician.
- In case of skin contact : This product is formulated for use on skin but should always be immediately washed off with plenty of water. Discontinue use if irritation and redness develop. If conditions persist for more than 72 hours, consult a physician.
- In case of eye contact : Rinse immediately with plenty of water for at least 15 minutes.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
- If swallowed : Keep respiratory tract clear.
DO NOT induce vomiting unless directed to do so by a physician or poison control center.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
- Most important symptoms and effects, both acute and delayed : Effects may be delayed, symptoms may include minor eye or skin irritation.
Overexposure may cause mild eye or skin irritation.
- Notes to physician : Treat symptomatically. Symptoms may be delayed.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Alcohol-resistant foam
Carbon dioxide (CO₂)
Dry chemical
Water spray jet
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : Carbon dioxide (CO₂)
Carbon monoxide
Smoke
- Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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- Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
- Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Material can create slippery conditions.
Use non-slip safety shoes in areas where spills or leaks can occur.
Refer to protective measures listed in sections 7 and 8.
- Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods and materials for containment and cleaning up : Wipe up with absorbent material (e.g. cloth, fleece).
Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Avoid contact with eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Dispose of rinse water in accordance with local and national regulations.
- Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
- Materials to avoid : Oxidizing agents

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Distillates (petroleum), hydrotreated light	64742-47-8	TWA	500 ppm 2,000 mg/m ³	OSHA Z-1
		TWA	400 ppm 1,600 mg/m ³	OSHA P0

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		TWA (Mist)	5 mg/m3	OSHA Z-1
		TWA (Mist)	5 mg/m3	OSHA P0
		TWA (Mist)	5 mg/m3	NIOSH REL
		ST (Mist)	10 mg/m3	NIOSH REL
		PEL (particulate)	5 mg/m3	CAL PEL
White mineral oil (petroleum)	8042-47-5	TWA (Mist)	5 mg/m3	
		STEL (Mist)	10 mg/m3	
Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.- hydroxy-Ethane-1,2-diol, ethoxylated	25322-68-3	TWA (aerosol)	10 mg/m3	US WEEL
			10 mg/m3	US WEEL

Engineering measures : effective ventilation in all processing areas

Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally required.

Hand protection
Remarks : No special protection is required.

Eye protection : Eye protection is not required while washing with this product. In the workplace, the use of safety glasses is recommended to avoid eye exposure during the handling of containers or during spill clean-up.

Skin and body protection : No special protection is required.

Hygiene measures : When using do not eat or drink.
When using do not smoke.
Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : viscous, liquid

Colour : red

Odour : like fruit

Odour Threshold : No data available

pH : 7 - 8

Melting point/freezing point : No data available

Boiling point : No data available

Flash point : > 93.3 °C
Method: TCC

Evaporation rate : No data available

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Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: No data available
Density	: 0.96 g/cm ³
Solubility(ies)	
Water solubility	: slightly soluble
Solubility in other solvents	: not determined
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: not determined
Thermal decomposition	: No data available
Viscosity	
Viscosity, kinematic	: > 25 mm ² /s (40 °C)

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Stable
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No decomposition if stored and applied as directed.
Conditions to avoid	: No data available
Incompatible materials	: Oxidizing agents
Hazardous decomposition products	: Carbon oxides

SECTION 11. TOXICOLOGICAL INFORMATION**Potential Health Effects**

Aggravated Medical Condition	: None known.
Symptoms of Overexposure	: Effects may be delayed, symptoms may include minor eye or skin irritation.

Carcinogenicity:**IARC** No component of this product present at levels greater than or

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ACGIH

equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

OSHA

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Acute toxicity**Product:**

Acute oral toxicity : Acute toxicity estimate : > 5,000 mg/kg
Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate : > 5,000 mg/kg
Method: Calculation method

Components:**Distillates (petroleum), hydrotreated light:**

Acute oral toxicity : LD50 Rat: > 5,000 mg/kg

Acute inhalation toxicity : LC50 Rat: > 4.6 mg/l
Exposure time: 6 h

Acute dermal toxicity : LD50 Rat: > 2,000 mg/kg

4-Nonylphenol branched, ethoxylated:

Acute oral toxicity : LD50 Rat: 5,000 mg/kg

Acute dermal toxicity : LD50 Rabbit: 2,573 mg/kg

Skin corrosion/irritation**Product:**

Result: No skin irritation

Serious eye damage/eye irritation**Product:**

Result: No eye irritation

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

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No data available

Reproductive toxicity

No data available

STOT - single exposure

No data available

STOT - repeated exposure

No data available

Aspiration toxicity

No data available

Further information**Product:**

Remarks: No data available

Components:**Distillates (petroleum), hydrotreated light:**

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity**

No data available

Persistence and degradability

No data available

Bioaccumulative potential**Product:**

Partition coefficient: n-octanol/water : Remarks: No data available

Mobility in soil

No data available

Other adverse effects

No data available

Product:

Regulation

40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances

Remarks

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A

BZ7385 ZEP CHERRY BOMB 095124 4/1G

Version 5.0

Revision Date 08/15/2017

Print Date 01/22/2018

+ B).

Additional ecological information : No data available

Components:**Distillates (petroleum), hydrotreated light :**

Additional ecological information : No data available

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

- Waste from residues : The product should not be allowed to enter drains, water courses or the soil.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Dispose of in accordance with local regulations.
- Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

Transportation Regulation: 49 CFR (USA):
NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation: IMDG (Vessel):
NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation: IATA (Cargo Air):
NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation: IATA (Passenger Air):
NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation: TDG (Canada):
NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

The product as delivered to the customer conforms to packaging requirements for shipment by road under US Department of Transportation (DOT) regulations. Additional transportation classifications noted above are for reference only, and not a certification or warranty of the suitability of the packaging for shipment under these alternative transport regulations.

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SECTION 15. REGULATORY INFORMATION

TSCA list : No substances are subject to a Significant New Use Rule.
No substances are subject to TSCA 12(b) export notification requirements.

EPCRA - Emergency Planning and Community Right-to-Know Act**CERCLA Reportable Quantity**

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : No SARA Hazards

SARA 302 : The following components are subject to reporting levels established by SARA Title III, Section 302:
Pumice 1332-09-8 2.59 %
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop 65 This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

The components of this product are reported in the following inventories:

TSCA On TSCA Inventory
DSL All components of this product are on the Canadian DSL

For information on the country notification status for other regions please contact the manufacturer's regulatory group.

Inventory Acronym and Validity Area Legend:

TSCA (USA), DSL (Canada), NDSL (Canada)

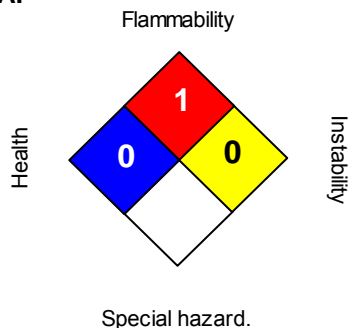
SECTION 16. OTHER INFORMATION

BZ7385 ZEP CHERRY BOMB 095124 4/1G

Version 5.0

Revision Date 08/15/2017

Print Date 01/22/2018

Further information**NFPA:****HMIS III:**

HEALTH	0
FLAMMABILITY	1
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

OSHA - GHS Label Information:

Not a hazardous substance or mixture.

Version:	5.0
Revision Date:	08/15/2017
Print Date:	01/22/2018

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. Users should make their own investigations to determine the suitability and applicability of the information for their particular purposes. This SDS has been prepared by the Compliance Services organization supporting this manufacturer, supplier or distributor.

Zep Inc. markets products under well recognized and established brand names such as Zep®, Zep Commercial®, Zep Professional®, Enforcer®, National Chemical™, Selig™, Misty®, Next Dimension™, Petro®, i-Chem®, TimeMist®, TimeWick™, MicrobeMax®, Country Vet®, Konk®, Original Bike Spirits®, Blue Coral®, Black Magic®, Rain-X®, Niagara National™, FC Forward Chemicals®, Rexodan®, Mykal™, and a number of private labeled brands.



January 5, 2015

June 12, 2015

1



5813-100

Household disinfecting, sanitizing, and laundry bleach

No information available

The Clorox Company
1221 Broadway
Oakland, CA 94612

Phone: 1-510-271-7000

For Medical Emergencies, call: 1-800-446-1014
For Transportation Emergencies, call Chemtrec: 1-800-424-9300

Not applicable.

Very toxic to aquatic life with long lasting effects.

Reacts with other household chemicals such as toilet bowl cleaners, rust removers, acids, or products containing ammonia to produce hazardous irritating gases, such as chlorine and other chlorinated compounds.



Sodium hypochlorite	7681-52-9	5 - 10	*
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* The exact percentage (concentration) of composition has been withheld as a trade secret.



Call a poison control center or doctor immediately for treatment advice. Show this safety data sheet to the doctor in attendance.

Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Move to fresh air. If breathing is affected, call a doctor.

Have person sip a glassful of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person. Call a poison control center or doctor immediately for treatment advice.

Avoid contact with skin, eyes, and clothing. Use personal protective equipment as required. Wear personal protective clothing (see section 8).

Burning of eyes and skin.

Treat symptomatically. Probable mucosal damage may contraindicate the use of gastric lavage.

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

CAUTION: Use of water spray when fighting fire may be inefficient.

This product causes burns to eyes, skin, and mucous membranes. Thermal decomposition can release sodium chlorate and irritating gases and vapors.

None.

None.

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Avoid contact with eyes, skin, and clothing. Ensure adequate ventilation. Use personal protective equipment as required. For spills of multiple products, responders should evaluate the MSDSs of the products for incompatibility with sodium hypochlorite. Breathing protection should be worn in enclosed and/or poorly-ventilated areas until hazard assessment is complete.

Refer to protective measures listed in Sections 7 and 8.

This product is toxic to fish, aquatic invertebrates, oysters, and shrimp. Do not allow product to enter storm drains, lakes, or streams. See Section 12 for ecological information.

Prevent further leakage or spillage if safe to do so.

Absorb and containerize. Wash residual down to sanitary sewer. Contact the sanitary treatment facility in advance to assure ability to process washed-down material.



Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes, and clothing. Do not eat, drink, or smoke when using this product.

Store away from children. Reclose cap tightly after each use. Store this product upright in a cool, dry area, away from direct sunlight and heat to avoid deterioration. Do not contaminate food or feed by storage of this product.

Toilet bowl cleaners, rust removers, acids, and products containing ammonia.



Sodium hypochlorite 7681-52-9	None	None	None
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ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

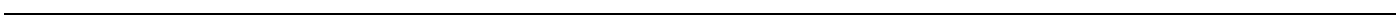
Showers
Eyewash stations
Ventilation systems

If splashes are likely to occur: Wear safety glasses with side shields (or goggles) or face shield.

Wear rubber or neoprene gloves and protective clothing such as long-sleeved shirt.

If irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Handle in accordance with good industrial hygiene and safety practice. Wash hands after direct contact. Do not wear product-contaminated clothing for prolonged periods. Remove and wash contaminated clothing before re-use. Do not eat, drink, or smoke when using this product.





	Thin liquid Clear Pale yellow	Bleach No information available
	~12 No data available No data available Not flammable No data available No data available	None known None known None known None known None known None known
	No data available No data available No data available No data available ~1.1 Soluble No data available No data available No data available No data available No data available No data available No data available Not explosive No data available	None known None known None known None known None known None known None known None known None known None known None known None known None known
	No data available No data available No data available No data available	



Reacts with other household chemicals such as toilet bowl cleaners, rust removers, acids, or products containing ammonia to produce hazardous irritating gases, such as chlorine and other chlorinated compounds.

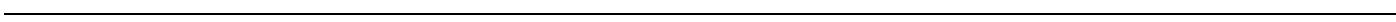
Stable under recommended storage conditions.

None under normal processing.

None known based on information supplied.

Toilet bowl cleaners, rust removers, acids, and products containing ammonia.

None known based on information supplied.





Exposure to vapor or mist may irritate respiratory tract and cause coughing. Inhalation of high concentrations may cause pulmonary edema.

Corrosive. May cause severe damage to eyes.

May cause severe irritation to skin. Prolonged contact may cause burns to skin.

Ingestion may cause burns to gastrointestinal tract and respiratory tract, nausea, vomiting, and diarrhea.

Sodium hypochlorite 7681-52-9	8200 mg/kg (Rat)	>10000 mg/kg (Rabbit)	-
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May cause redness and tearing of the eyes. May cause burns to eyes. May cause redness or burns to skin. Inhalation may cause coughing.

No information available.

No information available.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Sodium hypochlorite 7681-52-9	-	Group 3	-	-
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IARC (International Agency for Research on Cancer)
Group 3 - Not Classifiable as to Carcinogenicity in Humans

No information available.

No information available.

No information available.
Carcinogenic potential is unknown.
Respiratory system, eyes, skin, gastrointestinal tract (GI).

No information available.

54 g/kg

58 mg/L

Very toxic to aquatic life with long lasting effects.

This product is toxic to fish, aquatic invertebrates, oysters, and shrimp. Do not allow product to enter storm drains, lakes, or streams.

No information available.

No information available.

No information available.

Dispose of in accordance with all applicable federal, state, and local regulations. Do not contaminate food or feed by disposal of this product.

Do not reuse empty containers. Dispose of in accordance with all applicable federal, state, and local regulations.

Not restricted.

Not restricted for road or rail.

Not restricted, as per Special Provision A197, Environmentally Hazardous Substance exception.

Not restricted, as per Special Provision A197, Environmentally Hazardous Substance exception.

Not restricted, as per IMDG Code 2.10.2.7, Marine Pollutant exception.



All components of this product are either on the TSCA 8(b) Inventory or otherwise exempt from listing.
 All components are on the DSL or NDSL.

- United States Toxic Substances Control Act Section 8(b) Inventory
- Canadian Domestic Substances List/Non-Domestic Substances List

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Yes
 No
 No
 No
 No

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

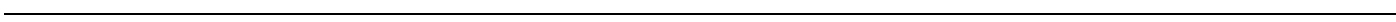
Sodium hypochlorite 7681-52-9	100 lb			X
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This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Sodium hypochlorite 7681-52-9	100 lb	-	RQ 100 lb final RQ RQ 45.4 kg final RQ
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This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

Causes irreversible eye damage and skin burns. Harmful if swallowed. Do not get in eyes, on skin, or on clothing. Wear protective eyewear and rubber gloves when handling this product. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the restroom. Avoid breathing vapors and use only in a well-ventilated area.



This product does not contain any Proposition 65 chemicals.

Sodium hypochlorite 7681-52-9	X	X	X	X	
Sodium chlorate 7775-09-9	X	X	X		

E - Corrosive material



_____	3	0	0	-
_____	3	0	0	B

Product Stewardship
23 British American Blvd.
Latham, NY 12110
1-800-572-6501

June 12, 2015

Revision Section 14.

1096036/164964.159



1. IDENTIFICATION

Product Identifier Diesel Fuel

Synonyms: Diesel Fuel, Motor Vehicle Diesel Fuel, Dyed Diesel, * DieselOne®, * DieselOne® w/Platinum Plus DFX, Low Sulfur Diesel (LSD), Ultra Low Sulfur Diesel (ULSD)

Intended use of the product: Fuel

Contact: Global Companies LLC
Water Mill Center
800 South St.
Waltham, MA 02454-9161
www.globalp.com

Contact Information: EMERGENCY TELEPHONE NUMBER (24 hrs): CHEMTREC (800) 424-9300
COMPANY CONTACT (business hours): 800-542-0778

2. HAZARD IDENTIFICATION

According to OSHA 29 CFR 1910.1200 HCS

Classification of the Substance or Mixture

Classification (GHS-US):

Flam. Liquid	Category 3	H226
Skin Corrosion/Irritation	Category 2	H315
Aspiration Hazard	Category 1	H304
STOT SE	Category 3	H336
Carcinogenicity	Category 2	H350
Aquatic Chronic	Category 2	H411
Serious Eye Damage/ Irritation	Category 2B	H319

Labeling Elements



Signal Word (GHS-US):

Hazard Statements (GHS-US):

Danger

H226 – Flammable liquid and vapor.
H315 – Causes Skin irritation.
H304 – May be fatal if swallowed and enters airways.
H336 – May cause drowsiness or dizziness.
H350 – May cause cancer.
H411 – Toxic to aquatic life with long lasting effects.
H319 – May cause eye damage/irritation.

Precautionary Statements (GHS-US):

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P233 - Keep container tightly closed.
P240 – Ground/bond container and receiving equipment.



SAFETY DATA SHEET

Diesel Fuel

P241 – Use explosion-proof electrical/ventilating/lighting equipment pursuant to applicable electrical code.
P242 – Use only non-sparking tools.
P243 – Take precautionary measures against static discharge.
P261 – Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 – Wash skin thoroughly after handling.
P271 – Use only outdoors or in a well-ventilated area.
P273 – Avoid release to the environment.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P303+361+353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse with water/shower.
P308+311 - If exposed or concerned: Get medical advice/attention.
P301+310 - If swallowed: Immediately call a poison center/doctor/...
P331 - Do NOT induce vomiting.
P370+P378 – In case of fire use firefighting foam or other appropriate media for Class B fires to extinguish.
P403+235 - Store in a well-ventilated place. Keep cool.
P405 - Store locked up.
P501 – Dispose of contents/container in accordance with local/regional/national/international regulation.

Other information:

NFPA 704
Health: 1
Fire: 2
Reactivity: 0



3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Composition Information

Mixture

Name	Product Identifier (CAS#)	% (w/w)	Classification
Diesel Fuel	68476-34-6	100	Flam Liq. 3, H226; Skin Irrit. 2, H315; Aspiration 1, H304; STOT SE 3, H336; Carc.2. H350; Aquatic chronic 2, H411
Naphthalene	91-20-3	<0.1	Carc. 2, H351; Acute Tox. 4, H302; Aquatic Acute 1, H400; Aquatic Chronic 1, H410

Additional Formulation Information:

Diesel Fuel consists of C9+ hydrocarbons resulting from distillation of crude oil.

Low Sulfur Diesel Fuel typically contains less than 500 ppm of sulfur

Ultra Low Sulfur Diesel Fuel typically contains less than 15 ppm of sulfur



4. FIRST AID MEASURES

Route	Measures
Inhalation	Remove person to fresh air. If person is not breathing, ensure an open airway and provide artificial respiration. If necessary, provide additional oxygen once breathing is restored if trained to do so. Seek medical attention immediately.
Ingestion	Aspiration Hazard: DO NOT INDUCE VOMITING. Do not give liquids. Obtain immediate medical attention. If spontaneous vomiting occurs, lean victim forward to reduce the risk of aspiration. Ingestion may cause gastrointestinal disturbances including irritation, nausea, vomiting, and diarrhea, and central nervous system (brain) effects similar to alcohol intoxication. In severe cases, tremors, convulsions, loss of consciousness, coma, respiratory failure, and death.
Eye Contact	In case of contact with eyes, immediately flush with clean, low-pressure water for at least 15 min. Hold eyelids open to ensure adequate flushing. Seek medical attention. In case of contact lenses, remove immediately.
Skin Contact	Remove contaminated clothing and shoes. Wash contaminated areas thoroughly with soap and water or waterless hand cleanser. Obtain medical attention if irritation or redness develops. Thermal burns require immediate medical attention depending on the severity and of the area of the body burned.

Most Important Symptoms

Contact with eyes and face may cause irritation. Long-term exposure may cause dermatitis (itching, irritation, pain and swelling).

Inhalation may cause irritation and significant or long term exposure could cause respiratory insufficiency and pulmonary edema.

Ingestion may cause aspiration, gastrointestinal disturbance, and CNS effects.

Immediate Medical Attention and Special Treatment

For contact with skin or eyes, immediately wash or flush contaminated eyes with gently flowing water. If possible, irrigate each eye continuously with 0.9% saline (NS). If ingested, rinse mouth. Do NOT induce vomiting, as this may cause chemical pneumonia (fluid in the lungs).

If inhaled, administer oxygen or establish a patent airway if breathing is labored. Suction if necessary. Monitor closely, anticipate seizures. Consider orotracheal or nostracheal intubation of airway control if patient is unconscious or is in severe respiratory distress.

Discard any clothing or shoes contaminated as they may be flammable.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Foam, carbon dioxide, dry chemical are most suitable

SMALL FIRES: Any extinguisher suitable for Class B fires, dry chemical, CO₂, water spray, firefighting foam, or Halon. Small fires in the incipient (beginning) stage may typically be extinguished using handheld portable fire extinguishers and other firefighting equipment.

LARGE FIRES: Foam, carbon dioxide, dry chemical. Water may be ineffective for fighting the fire, but may be used to cool fire-exposed containers.

Specific Hazards / Products of Combustion

Moderate fire hazard when exposed to heat or flame with a very low flash point. Product is flammable and easily ignited when exposed to heat, spark, open flame or other source of ignition. Flowing product may be ignited by self-generated static electricity. When mixed with air and exposed to an ignition source, flammable vapors can burn in the open or explode in confined spaces. Being heavier than air, vapors may travel long distances to an ignition source and flash back. Runoff to sewer may cause fire or explosion hazard.

Combustion may produce smoke, carbon monoxide and other products of incomplete combustion.

Special Precautions and Protective Equipment for Firefighters

Isolate area around container involved in fire. Cool tanks, shells, and containers exposed to fire and excessive heat with water.



For massive fires the use of unmanned hose holders or monitor nozzles may be advantageous to further minimize personnel exposure. Major fires may require withdrawal, allowing the tank to burn. Large storage tank fires typically require specially trained personnel and equipment to extinguish the fire, often including the need for properly applied firefighting foam.

Fighting Equipment/Instructions

Firefighting activities that may result in potential exposure to high heat, smoke or toxic by-products of combustion should require NIOSH- approved pressure-demand self-contained breathing apparatus with full face piece and protective clothing.

Refer to Section 9 for fire properties of this chemical including flash point, auto ignition temperature, and explosive limits.

6. ACCIDENTAL RELEASE MEASURES

ACTIVATE FACILITY SPCC, SPILL CONTINGENCY or EMERGENCY PLAN.

Personal Precautions

Due to high vapor density, flammable / toxic vapors may be present in low lying areas, dikes, pits, drains, or trenches. Vapors may accumulate in low lying areas and reach ignitable concentrations. Ventilate the area. Use of non-sparking tools and intrinsically safe equipment is recommended. Potential for flammable atmosphere should be monitored using a combustible gas indicator positioned downwind of the spill area. Refer to Sections 2 and 7 for further hazard warnings and handling instructions.

Use appropriate personal protective equipment to prevent eye/skin contact and absorption. Use NIOSH approved respiratory protection, if warranted, to prevent exposures above permissible limits. Refer to Section 8. Contaminated clothing should not be near sources of ignition.

Emergency Measures

As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. Consider wind direction. Secure all ignition sources (flame, spark, hot work, hot metal, etc.) from area. Evaluate the direction of product travel, diking sewers, etc. to confirm spill areas. Do not touch or walk-through spilled material. For large spills, isolate initial action distance downwind 1,000 ft. (300 m).

Environmental Precautions

Stop the spill to prevent environmental release if it can be done safely. Product is toxic to aquatic life. Take action to isolate environmental receptors including drains, storm sewers and natural water bodies. Keep on impervious surface if at all possible. Use water sparingly to prevent product from spreading. Foam and absorbents may be used to reduce / prevent airborne release.

Spills may infiltrate subsurface soil and groundwater; professional assistance may be necessary to determine the extent of subsurface impact.

Follow federal, state or local requirements for reporting environmental release where necessary. Refer to Section 15 for further information.

Containment and Clean-Up Methods

Carefully contain and stop the source of the spill, if safe to do so. Protect bodies of water by diking absorbents, or absorbent boom, if possible. Do not flush down sewer or drainage systems, unless system is designed and permitted to handle such material. The use of firefighting foam may be useful in certain situations to reduce vapors. The proper use of water spray may effectively disperse product vapors or the liquid itself, preventing contact with ignition sources or areas/equipment that require protection.

Take up with dry earth, sand or other non-combustible, inert oil absorbing materials. Carefully shovel, scoop or sweep up into a waste container with clean, non-sparking tools for reclamation or disposal. Response and cleanup crews must be properly trained and must utilize proper protective equipment. Refer to Section 8 for appropriate protective equipment.

7. HANDLING AND STORAGE

USE ONLY AS A FUEL. DO NOT SIPHON BY MOUTH.

Handling Precautions

Handle as a flammable liquid. Keep away from heat, sparks, and open flame. No smoking. Electrical equipment should be approved for classified area. Bond and ground containers during product transfer pursuant to NFPA 70 and API RP 2003 to



reduce the possibility of static-initiated fire or explosion. Follow precautions to prevent static initiated fire.

Use good personal hygiene practices. Use only with protective equipment specified in Section 8. Avoid repeated and/or prolonged skin exposure. Use only outdoors or in well ventilated areas. Wash hands before eating, drinking, smoking, or using toilet facilities. Do not use as a cleaning solvent on the skin. Do not use solvents or harsh abrasive skin cleaners for washing this product from exposed skin areas. Waterless hand cleaners are effective. Promptly remove contaminated clothing and launder before reuse. Use care when laundering to prevent the formation of flammable vapors which could ignite via washer or dryer. Consider the need to discard contaminated leather shoes and gloves. Emergency eye wash capability should be available in the near proximity to operations presenting a potential splash exposure.

Special slow load procedures for "switch loading" must be followed to avoid the static ignition hazard that can exist when higher flash point material (such as fuel oil) is loaded into tanks previously containing low flash point products (such as this product) - see API RP 2003, "Protection Against Ignitions Arising Out Of Static, Lightning and Stray Currents."

Storage

Large quantities of diesel fuel are stored in tanks or portable containers at an ambient storage temperature. Separate from incompatible chemicals (Refer to Section 10) by distance or secondary containment. Keep away from flame, sparks, excessive temperatures and open flame. Use approved vented containers that are clearly labeled. Label all secondary containers that this material is transferred into with the chemical name and associated hazard(s). Empty product containers or vessels may contain flammable vapors. Do not pressurize, cut, heat, weld or expose such containers to sources of ignition.

Storage tanks should have a venting system. If stored in small containers, the area should be well ventilated, away from ignition sources and protected from potential damage or vehicular traffic. Post "No Smoking" signs in product storage areas. This storage area should comply with NFPA 30 "Flammable and Combustible Liquid Code" or applicable building code. The cleaning of tanks previously containing this product should follow API Recommended Practice (RP) 2013 "Cleaning Mobile Tanks in Flammable and Combustible Liquid Service" and API RP 2015 "Safe Entry and Cleaning of Petroleum Storage Tanks".

Incompatibles

Keep away from strong oxidizers, ignition sources and heat.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational Exposure Limits

Component	CAS #	List	Value
Diesel Fuel	68476-34-6	ACGIH TLV-TWA	100 mg/m3*
Naphthalene	91-20-3	ACGIH TLV-TWA OSHA PEL ACGIH STEL	10 ppm 10 ppm 15 ppm

*Critical effects; Skin; A3; CNS impairment.

Engineering Controls

Use adequate ventilation to keep vapor concentrations of this product below occupational exposure and flammability limits, particularly in confined spaces. Intrinsically safe equipment and non-sparking tools shall be used in circumstances where concentrations may exceed lower flammable limits. Grounding and bonding shall be used to prevent accumulation and discharge of static electricity. Emergency shower and eyewash should be provided in proximity to handling areas in the event of exposure to decontaminate.

Personal Protective Equipment

Exposure	Equipment
Eye / Face	Wear appropriate chemical protective glasses or goggles or face shields to prevent skin and eye contact especially caused from splashing.
Skin	Wear appropriate personal protective clothing to prevent skin contact. Gloves constructed of nitrile, neoprene or PVC are recommended when handling this material. Chemical protective clothing such as of E.I. DuPont TyChem®, Saranex® or equivalent recommended based on degree of exposure. Note: The resistance of specific material may vary from product to product as well as with degree of exposure.



Exposure	Equipment
Respiratory	<p>A NIOSH/MSHA-approved air-purifying respirator with organic vapor cartridges or canister may be permissible under certain circumstances where airborne concentrations are or may be expected to exceed exposure limits or for odor or irritation. Protection provided by air-purifying respirators is limited. Refer to OSHA 29 CFR 1910.134, ANSI Z88.2-1992, NIOSH Respirator Decision Logic, and the manufacturer for additional guidance on respiratory protection selection and limitations.</p> <p>Use a positive pressure, air-supplied respirator if there is a potential for uncontrolled release, exposure levels are not known, in oxygen-deficient atmospheres, or any other circumstance where an air-purifying respirator may not provide adequate protection.</p>
Thermal	<p>Product is stored at ambient temperature. No thermal protection is required except for emergency operations involving actual or potential for fire. Use adequate ventilation to keep vapor concentrations of this product below occupational exposure and flammability limits, particularly in confined spaces.</p>

9. PHYSICAL AND CHEMICAL PROPERTIES

Property	Value
Appearance	Clear or straw-colored liquid. May be dyed red for distribution.
Odor	Mild characteristic petroleum distillate odor.
Odor Threshold	<1 ppm
pH	Not available
Melting Point	-22 to -0.4 °F (-30 to -18 °C)
Boiling Point Range	320 to 690 °F (160 to 366 °C)
Flash Point	> 125.6 °F (52 °C) PMCC
Evaporation Rate	Slow, varies with conditions
Flammability	Flammable liquid
Flammable Limits	0.6 % - 6.5%
Vapor Pressure	0.009 psia @ 70 °F
Vapor Density	> 1 (air=1)
Specific Gravity	0.83-0.86 @ 60 °F (16 °C) (water=1)
Solubility	Insoluble in water; miscible with other petroleum solvents.
Partition Coefficient (N-octanol/water)	Log Kow range of 3.3 to >.6.0
Autoignition Temperature	494 °F (257 °C)
Decomposition Temperature	When heated it emits acrid smoke and irritating vapors.
Viscosity	>3 cSt
Percent Volatiles	100

10. STABILITY AND REACTIVITY

Stability

This is a stable material that is flammable liquid (OSHA/GHS hazard category 3). Stable during transport.

Reactivity

Material is not self-reacting. Flammable concentrations may be present in air. Compound can react with oxidizing materials.



Possibility of Hazardous Reactions

Hazardous polymerization will not occur.

Incompatibility

Keep away from strong oxidizers such as nitric and sulfuric acids.

Conditions to Avoid

Avoid high temperatures, open flames, sparks, static electricity, welding, smoking and other ignition sources.

Hazardous Decomposition Products

Carbon monoxide, carbon dioxide and non-combusted hydrocarbons (smoke).

11. TOXICOLOGICAL INFORMATION

Acute Toxicity:

Acute Toxicity (Inhalation LC50)

Diesel Fuel (68476-34-6)

LC50 Inhalation Rat >6 mg/l/4h

Acute Toxicity (Dermal LD50)

Diesel Fuel (68476-34-6)

LD50 Dermal Rabbit >5000 mg/kg

Acute Toxicity (Oral LD50)

Diesel Fuel (68476-34-6)

LD50 Oral Rabbit >5000 mg/kg

Skin Corrosion/Irritation: Prolonged and repeated contact may cause skin irritation leading to dermatitis. Liquid may be absorbed through the skin in toxic amounts if large areas of skin are exposed repeatedly.

Serious Eye Damage/Irritation: Causes serious eye irritation.

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Teratogenicity: Not available

Carcinogenicity: OSHA: NO, IARC: Group 3, NTP: NO, ACGIH: NOIC:A3, NIOSH: NO

IARC: Group 3 – Not classifiable as to their carcinogenicity to humans

ACGIH: A3 – Confirmed animal carcinogen with unknown relevance to humans.

Studies have shown that similar products produce skin tumors in laboratory animals following repeated applications without washing or removal. The significance of this finding to human exposure has not been determined. Other studies with active skin carcinogens have shown that washing the animal's skin with soap and water between applications reduced tumor formation.

IARC classifies whole diesel fuel exhaust particulates (byproduct of combustion of this material) carcinogenic to humans (Group 1) and NIOSH regards diesel fuel exhaust particulate as a potential occupational carcinogen.

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Specific Target Organ Toxicity (Single Exposure): Inhalation exposure may cause drowsiness or dizziness by inhalation exposure.

Aspiration Hazard: The major health threat of ingestion occurs from the danger of aspiration (breathing) of liquid drops into the lungs, particularly from vomiting. Aspiration may result in chemical pneumonia (fluid in the lungs), severe lung damage, respiratory failure and even death.

Potential Health Effects: Vapor irritating to skin, eyes, nose, and throat. Ingestion may cause gastrointestinal disturbances, including irritation, nausea, vomiting and diarrhea, and central nervous system (brain) effects similar to alcohol intoxication. In severe cases, tremors, convulsions, loss of consciousness, coma, respiratory arrest, and death may occur.

WARNING: The burning of any hydrocarbon as a fuel in an area without adequate ventilation may result in hazardous levels of



combustion products, including carbon monoxide, and inadequate oxygen levels, which may cause unconsciousness, suffocation, and death.

12. ECOLOGICAL INFORMATION

Toxicity:

This material is expected to be toxic to aquatic organisms and may cause long-term adverse effects in the aquatic environment.

Data for Component: Diesel Fuel (68476-34-6)

Material is toxic to aquatic organisms based on an acute basis (LC50/EC50 >1 but ≤ 10 mg/L in the most sensitive species tested).

Material is a long-term aquatic hazard based on a chronic basis (LC50/EC50 >1 but ≤ 10 mg/L in the most sensitive species tested).

Persistence and Degradation: This material is not expected to be readily biodegradable.

Bioaccumulative Potential: Not available

Mobility in Soil: Not available

Other Adverse Effects: None known

Other Information: Avoid release to the environment.

13. DISPOSAL CONSIDERATIONS

Consult federal, state and local waste regulations to determine appropriate disposal options. May be considered a hazardous waste if disposed. Direct solid waste (landfill) or incineration at a solid waste facility is not permissible. Do not discharge to sanitary or storm sewer. Personnel handling waste containers should follow precautions provided in this document.

Shipping containers must be DOT authorized packages. Follow licensure and regulations for transport of hazardous material and hazardous waste as applicable.

14. TRANSPORT INFORMATION

US DOT

UN Identification Number	NA 1993 / UN 1202
Proper Shipping Name	Diesel Fuel
Hazard Class and Packing Group	3, PGIII
Shipping Label	Combustible liquid
Placard / Bulk Package	Combustible liquid, 1993
Emergency Response Guidebook Guide Number	128

IATA Information

UN Identification Number	UN 1202
Proper Shipping Name	Combustible-Liquid, N.O.S. (Fuel, Diesel)
Hazard Class and Packing Group	3, PGIII
ICAO Label	3
Packing Instructions Cargo	310
Max Quantity Per Package Cargo	220L
Packing Instructions Passenger	309Y
Max Quantity per Package	60L

ICAO

UN Identification Number	UN 1202
Shipping Name / Description	Combustible-Liquid, N.O.S. (Fuel, Diesel)
Hazard Class and Packing Group	3, PG III
IMDG Label	3



IMDG

UN Identification Number	UN 1202
Shipping Name / Description	Combustible-Liquid, N.O.S. (Fuel, Diesel)
Hazard Class and Packing Group	3, PGIII
IMDG Label	3
EmS Number	F-E-S-E
Marine Pollutant	Yes

15. REGULATORY INFORMATION

U.S. Federal, State, and Local Regulatory Information

Any spill or uncontrolled release of this product, including any substantial threat of release, may be subject to federal, state and/or local reporting requirements. This product and/or its constituents may also be subject to other federal, state, or local regulations; consult those regulations applicable to your facility/operation.

OSHA Hazard Communication Standard

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning And Community Right-to-Know Act of 1986) Sections 311 and 312

Immediate (Acute) Health Hazard	Yes
Delayed (Chronic) Health Hazard	Yes
Fire Hazard	Yes
Reactive Hazard	No
Sudden Release of Pressure Hazard	No

Clean Water Act (Oil Spills)

Any spill or release of this product to "navigable waters" (Essentially any surface water, including certain wetlands) or adjoining shorelines sufficient to cause a visible sheen or deposit of a sludge or emulsion must be reported immediately to the National Response Center (1-800-424-8802) or, if not practical, the U.S. Coast Guard with follow up to the National Response Center, as required by U.S. Federal Law. Also contact appropriate state and local regulatory agencies as required.

CERCLA Section 103 and SARA Section 304 (Release to the Environment)

The CERCLA definition of hazardous substances contains a "petroleum exclusion" clause which exempts this material. This product does not contain any chemicals subject to the reporting requirements of CERCLA Section 103 or SARA 304.

SARA Section 313- Supplier Notification

This product does not contain any chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act (EPCRA) of 1986 and of 40 CFR 372.

EPA Notification (Oil Spills)

If there is a discharge of more than 1,000-gallons of oil into or upon navigable waters of the United States, or if it is the second spill event of 42 gallons or more of oil into water within a twelve (12) month period, a written report must be submitted to the Regional Administrator of the EPA within sixty days of the event.

Pennsylvania Right to Know Hazardous Substance list:

The following product components are cited in the Pennsylvania Special Hazardous Substance List, and are present at levels which require reporting.

Component	CAS	Amount
Diesel Fuel	68476-34-6	100%

New Jersey Right to Know Hazardous Substance list:

The following product components are cited in the New Jersey Right to Know Hazardous Substance List, and are present at levels which require reporting.

Component	CAS	Amount
Diesel Fuel	68476-34-6	100%



California Proposition 65 WARNING: This product contains chemicals known to the State of California to cause Cancer or Reproductive Toxicity.

Component	CAS	Amount
Naphthalene	91-20-3	<0.1%

U.S. Toxic Substances Control Act

All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.30.

CEPA - Domestic Substances List (DSL)

All substances contained in this product are listed on the Canadian Domestic Substances List (DSL) or are not required to be listed.

Canadian Regulatory Information (WHMIS)

Class B3 – Combustible Liquid
Class D2A – Materials causing other toxic effects. (Very Toxic)

16. OTHER INFORMATION

Version	4
Issue Date	May 20, 2016
Prior Issue Date	May 3, 2015

Description of Revisions

Revised to meet Globally Harmonized System for chemical hazard communication requirements pursuant to OSHA regulatory revisions 77 FR 17884, March 26, 2012.

Abbreviations

°F	Degrees Fahrenheit (temperature)	mL	Milliliter
<	Less than	mm ²	Square millimeters
=	Equal to	mmHg	Millimeters of mercury (pressure)
>	Greater than	N/A	Not applicable
AP	Approximately	N/D	Not determined
C	Centigrade (temperature)	ppm	Parts per million
kg	Kilogram	sec	Second
L	Liter	ug	Micrograms
mg	Milligrams		

Acronyms

ACGIH	American Conference of Governmental Industrial Hygienists	GHS	Global Harmonized System
AIHA	American Industrial Hygiene Association	HMIS	Hazardous Materials Information System
AL	Action Level	IARC	International Agency for Research On Cancer
ANSI	American National Standards Institute	IATA	International Air Transport Association
API	American Petroleum Institute	IMDG	International Maritime Dangerous Goods
CAS	Chemical Abstract Service	Koc	Soil Organic Carbon
CERCLA	Comprehensive Emergency Response, Compensation, and Liability Act	LC50	Lethal concentration 50%
DOT	U.S. Department of Transportation	LD50	Lethal dose 50%
EC50	Ecological concentration 50%	MSHA	Mine Safety and Health Administration
EPA	U.S. Environmental Protection Agency	NFPA	National Fire Protection Association
ERPG	Emergency Response Planning Guideline	NIOSH	National Institute of Occupational Safety and Health
		NOIC	Notice of Intended Change



SAFETY DATA SHEET

Diesel Fuel

NTP	National Toxicology Program	STEL	Short Term Exposure Limit (generally 15 minutes)
OPA	Oil Pollution Act of 1990	TLV	Threshold Limit Value (ACGIH)
OSHA	U.S. Occupational Safety & Health Administration	TSCA	Toxic Substances Control Act
PEL	Permissible Exposure Limit (OSHA)	TWA	Time Weighted Average (8 hr.)
RCRA	Resource Conservation and Recovery Act Reauthorization Act of 1986 Title III	UN	United Nations
REL	Recommended Exposure Limit (NIOSH)	UNECE	United Nations Economic Commission for Europe
RVP	Reid Vapor Pressure	WEEL	Workplace Environmental Exposure Level (AIHA)
SARA	Superfund Amendments and	WHMIS	Canadian Workplace Hazardous Materials Information System
SCBA	Self Contained Breathing Apparatus		
SPCC	Spill Prevention, Control, and Countermeasures		

Disclaimer of Expressed and Implied Warranties

Information presented herein has been compiled from sources considered to be dependable, and is accurate and reliable to the best of our knowledge and belief, but is not guaranteed to be so. Since conditions of use are beyond our control, we make no warranties, expressed or implied, except those that may be contained in our written contract of sale or acknowledgment.

Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material, even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in their use of the material.

** End of Safety Data Sheet **

SAFETY DATA SHEET

Issuing Date 25-Mar-2013

Revision Date 26-Mar-2019

Revision Number 2

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier 275, 276, 277, 278

Product Name DRYLOK® Original Basement & Masonry Waterproofer

Other means of identification

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Waterproofing Sealers, Concrete/Masonry

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Address
United Gilsonite Laboratories
1396 Jefferson Ave.
Dunmore
PA
18509
US
Phone:570-344-1202
Fax:570-969-7634
Email:sales@ugl.com
Contact Phone:570-344-1202

Emergency telephone number (800) 424-9300 Chemtrec

2. HAZARDS IDENTIFICATION


Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Vapors)	Category 4
Serious eye damage/eye irritation	Category 2
Carcinogenicity	Category 1A
Reproductive toxicity	Category 2
Specific target organ toxicity (repeated exposure)	Category 2

GHS Label elements, including precautionary statements

Emergency Overview

Signal word	Danger
Hazard statements	
Harmful if swallowed	
Harmful if inhaled	
Causes serious eye irritation	
May cause cancer	
Suspected of damaging fertility or the unborn child	
May cause damage to organs through prolonged or repeated exposure	
	
Appearance Color	Physical State Liquid
	Odor Ammonia

Precautionary Statements - Prevention

- Obtain special instructions before use
- Do not handle until all safety precautions have been read and understood
- Use personal protective equipment as required
- Wash face, hands and any exposed skin thoroughly after handling
- Do not eat, drink or smoke when using this product
- Use only outdoors or in a well-ventilated area
- Do not breathe dust/fume/gas/mist/vapors/spray

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not Applicable

Other information

- Harmful to aquatic life with long lasting effects

Interactions with Other Chemicals No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %	Trade Secret
Quartz	14808-60-7	15 - 40	*
Limestone	1317-65-3	15 - 40	*
Mica	12001-26-2	5 - 10	*
Diethylene glycol monomethyl ether	111-77-3	3 - 7	*
Titanium dioxide	13463-67-7	3 - 7	*

* The exact percentage (concentration) of composition has been withheld as a trade secret

4. FIRST AID MEASURES

First aid measures**General Advice**

Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

Eye Contact

If symptoms persist, call a physician. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if applicable, and continue flushing. Keep eye wide open while rinsing. Do not rub affected area.

Skin Contact

Wash skin with soap and water. In the case of skin irritation or allergic reactions see a physician.

Inhalation

Move to fresh air. If symptoms persist, call a physician. If breathing has stopped, contact emergency medical services immediately. If not breathing, give artificial respiration. Avoid breathing dust.

Ingestion

Do NOT induce vomiting. Rinse mouth. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Get medical attention.

Protection of First-aiders

Avoid contact with skin, eyes and clothing. Use personal protective equipment. For personal protection see Section 8. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Avoid breathing vapors or mists

Most important symptoms and effects, both acute and delayed

Most Important Symptoms/Effects Burning sensation. Coughing and/ or wheezing. Difficulty in breathing.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media

CAUTION: Use of water spray when fighting fire may be inefficient.

Specific Hazards Arising from the Chemical

No information available

Uniform Fire Code	Irritant: Liquid Toxic: Liquid
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Hazardous Combustion Products

Carbon oxides.

Explosion Data

Sensitivity to Mechanical Impact No

Sensitivity to Static Discharge No

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

Personal Precautions Avoid contact with skin, eyes and clothing. Use personal protective equipment. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing vapors or mists

Other Information Refer to protective measures listed in Sections 7 and 8.

Environmental precautions

Environmental Precautions Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use. Avoid breathing vapors or mists. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Store locked up.

Incompatible Products None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Quartz 14808-60-7	TWA: 0.025 mg/m ³ respirable fraction	TWA: 0.1 mg/m ³ (vacated)	IDLH: 50 mg/m ³ respirable dust TWA: 0.05 mg/m ³ respirable dust
Limestone 1317-65-3	-	TWA: 15 mg/m ³ TWA: 5 mg/m ³ (vacated) TWA: 15 mg/m ³ (vacated) TWA: 5 mg/m ³	TWA: 5 mg/m ³ respirable dust TWA: 10 mg/m ³ total dust
Mica 12001-26-2	TWA: 3 mg/m ³	TWA: 20 mppcf (<1% crystalline silica) 3 mg/m ³ (vacated)	IDLH: 1500 mg/m ³ containing <1% quartz TWA: 3 mg/m ³ respirable dust
Titanium dioxide 13463-67-7	TWA: 10 mg/m ³	TWA: 15 mg/m ³ total dust (vacated) TWA: 10 mg/m ³ total dust	IDLH: 5000 mg/m ³

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

Other Exposure Guidelines Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Measures Showers
Eyewash stations
Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/Face Protection If splashes are likely to occur, wear: Safety glasses with side-shields. None required for consumer use.

Skin and Body Protection Wear protective gloves/clothing.

Respiratory Protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Avoid contact with skin, eyes and clothing. Wear suitable gloves and eye/face protection. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical State	Liquid	Odor	Ammonia
Appearance	Color	Odor Threshold	No information available
Color	No information available		

<u>Property</u>	<u>Values</u>	<u>Remarks/ Method</u>
pH	9.5	None known
Melting/freezing point	No data available	None known
Boiling Point/Range	100 °C / 212 °F	None known
Flash Point	5001C / 9034F	None known
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limits in Air		
Upper flammability limit	No data available	
Lower flammability limit	No data available	
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Specific Gravity	No data available	None known
Water Solubility	Soluble in water.	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Explosive Properties	No data available	
Oxidizing Properties	No data available	

Other Information

Softening Point	No data available
VOC Content (%)	No data available

10. STABILITY AND REACTIVITY

Reactivity

No data available.

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to avoid

Excessive heat.

Incompatible materials

None known based on information supplied.

Hazardous Decomposition Products

Carbon oxides.

11. TOXICOLOGICAL INFORMATION

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation	There is no data available for this product. May cause irritation of respiratory tract. Harmful by inhalation. (based on components)
Eye Contact	There is no data available for this product. Expected to be an irritant based on components. May cause redness, itching, and pain. May cause temporary eye irritation.
Skin Contact	There is no data available for this product. May cause irritation. Prolonged contact may cause redness and irritation.
Ingestion	There is no data available for this product. Ingestion may cause irritation to mucous membranes. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Harmful if swallowed. (based on components). May be harmful if swallowed.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Quartz 14808-60-7	= 500 mg/kg (Rat)	-	-
Titanium dioxide 13463-67-7	> 10000 mg/kg (Rat)	-	-

Information on toxicological effects

Symptoms May cause redness and tearing of the eyes. Coughing and/ or wheezing.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.

Mutagenic Effects No information available.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Quartz 14808-60-7	A2	Group 1	Known	X
Titanium dioxide 13463-67-7		Group 2B		X

ACGIH: (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

IARC: (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

Group 3 - Not Classifiable as to Carcinogenicity in Humans

NTP: (National Toxicity Program)

Known - Known Carcinogen

OSHA: (Occupational Safety & Health Administration)

X - Present

Reproductive Toxicity

STOT - single exposure

STOT - repeated exposure

Contains a known or suspected reproductive toxin.

No information available.

Causes damage to organs through prolonged or repeated exposure. Based on classification criteria from the 2012 OSHA Hazard Communication Standard (29 CFR 1910.122), this product has been determined to cause systemic target organ toxicity from chronic or repeated exposure. (STOT RE). If this product is a mixture, the classification is not based on toxicology studies for this product, but is based solely on toxicology studies for ingredients found within this product. More detailed substance and/or ingredient information may be provided in the other sections of this SDS

Chronic Toxicity	No known effect based on information supplied. Contains a known or suspected carcinogen Contains a known or suspected reproductive toxin.. Possible risks of irreversible effects. Avoid repeated exposure. Prolonged exposure may cause chronic effects. Titanium dioxide has been classified by the International Agency for Research on Cancer (IARC) as possibly carcinogenic to humans (Group 2B) by inhalation. May cause adverse liver effects.
Target Organ Effects	Eyes. Respiratory system. Skin. Gastrointestinal tract (GI). Reproductive system. Lungs. Kidney. Liver.
Aspiration Hazard	No information available.

Numerical measures of toxicity Product Information

The following values are calculated based on chapter 3.1 of the GHS document

- ATEmix (oral)**
170.00 mg/kg
- ATEmix (inhalation-vapor)**
10.90ATEmix

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects.

Persistence and Degradability

No information available.

Bioaccumulation

No information available.

Other Adverse Effects

No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste Disposal Methods This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated Packaging Dispose of in accordance with local regulations.

California Hazardous Waste Codes 331

14. TRANSPORT INFORMATION

DOT NOT REGULATED
Proper Shipping Name NON REGULATED
Hazard Class N/A

TDG Not regulated

14. TRANSPORT INFORMATION

<u>MEX</u>	Not regulated
<u>ICAO</u>	Not regulated
<u>IATA</u>	Not regulated
Proper Shipping Name	NON REGULATED
Hazard Class	N/A
<u>IMDG/IMO</u>	Not regulated
Hazard Class	N/A
<u>RID</u>	Not regulated
<u>ADR</u>	Not regulated
<u>ADN</u>	Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL	All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values %
Diethylene glycol monomethyl ether - 111-77-3	111-77-3	3 - 7	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

End of Safety Data Sheet

Safety Data Sheet

Per GHS Standard Format

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name: Fiberset PM No. 7470 White, No. 7475 Clear & No. 7480 Blue
Recommended Use of Product: Post-Removal Surface Sealant

Information on the Supplier of the Safety Data Sheet

Manufactured For:
Fiberlock Technologies
150 Dascomb Road
Andover, MA 01810
P: 978-623-9980 F: 978-475-6205

Emergency Telephone Numbers:
CHEM TEL: (U.S.): 1-800-255-3924
(Outside the U.S.): 813-248-0585

SECTION 2: HAZARDS IDENTIFICATION

Signal Word: **WARNING**



GHS Label Statements

Hazard Statements:
Harmful if inhaled.
Causes serious eye irritation.
May cause an allergic skin reaction.
May cause cancer.

GHS Classifications

This product is considered hazardous by The 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute Toxicity-Inhalation (Vapors) Category 4
Acute Toxicity-Inhalation (Dust-mists) Category 2
Serious eye damage/eye irritation – Category 2
Skin sensitization – Category 1

PRECAUTIONARY STATEMENTS

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protection (eye protection, gloves) during application. When grinding/sanding dry films, wear respiratory protection.

Response: If on skin, wash with plenty of soap and water. If in eyes, rinse cautiously for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If inhaled, remove victim to fresh air. If exposed or concerned, get medical advice.

Storage: Keep closures tight and containers upright to prevent leakage. KEEP FROM FREEZING. Product is non-combustible.

Disposal: The coating and any contaminated diking material should be thoroughly air dried and collected into drums. The drums should be sealed and labeled and land-filled or incinerated according to local, regional and national regulations.

Hazards Not Otherwise Classified (NHOC): Not applicable

Other Information: Toxic to aquatic life with long lasting effects. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.

SECTION 3: COMPOSITION INFORMATION ON INGREDIENTS

<u>Chemical Name</u>	<u>CAS No.</u>	<u>Weight, %**</u>
*Titanium dioxide	13463-67-7	10-30
Propylene glycol	57-55-6	3-7
Chlorothalonil	1897-45-6	0.1-1
Polyethylene glycol branched nonylphenyl ether	68412-54-4	0.1-1
***Pathalocyanine blue	Proprietary	<.50

*Not in PM Cleartone Base #7475 or in Blue #7480

**The exact concentration of composition has been withheld as a trade secret.

*** Only in 7480 Blue

SECTION 4: FIRST AID MEASURES

General Advice

Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

Eye Contact

If symptoms persist, call a physician. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area.

Skin Contact

Wash skin with soap and water. In the case of skin irritation or allergic reactions see a physician. May cause an allergic skin reaction.

Inhalation

Remove to fresh air. If symptoms persist, call a physician. If breathing has stopped, give artificial respiration. Get medical attention immediately. If not breathing, give artificial respiration. Do not breathe dust.

Ingestion

Do NOT induce vomiting. Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person. Get medical attention.

Self-Protection of the First Aider

Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Wear personal protective clothing (see section 8). Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid breathing vapors or mists.

Most important symptoms and effects, both acute and delayed

Most Important Symptoms and Effects

Burning sensation. Coughing and/or wheezing. Difficulty in breathing. Itching. Rashes. Hives.

Indication of any immediate medical attention and special treatment needed

Notes to Physician

Treat symptomatically. May cause sensitization of susceptible persons.

SECTION 5: FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media: CAUTION: Use of water spray when fighting fire may be inefficient.

Specific Hazards Arising from the Chemical: Product is/or contains a sensitizer. May cause sensitization by skin contact.

Uniform Fire Code

Sensitizer: Liquid Toxic: Liquid

Hazardous Combustion Products: Carbon oxides

Explosion Data

Sensitivity to mechanical impact No.

Sensitivity to static impact No.

Protective Equipment and Precautions for Firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions: Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Ensure adequate ventilation. Avoid breathing vapors or mists. Avoid generation of dust.

Other Information: Refer to protective measures listed in Sections 7 & 8.

Environmental Precautions

Environmental Precautions: Refer to protective measures listed in Sections 7 & 8.

Methods and Material for Containment and Cleaning Up

Methods for Containment: Prevent further leakage or spillage if safe to do so

Methods for Cleaning Up: Immediately place absorbent material in a sealed water-filled metal container to avoid spontaneous combustion of absorbent material contaminated with this product. Pick up and transfer to properly labeled containers.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Handling: Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Avoid breathing vapors or mists. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Take off contaminated clothing and wash before reuse. Keep away from contact with clothing and other combustible materials to avoid fire.

Conditions for Safe Storage, Including any Incompatibilities

Storage: Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children.

Incompatible Products: None known based on information supplied

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Titanium dioxide 13463-67-7	TWA: 10 mg/m ³	TWA: 15 mg/m ³ total dust (vacated) TWA: 10 mg/m ³ total dust	IDLH: 5000 mg/m ³

ACGIH TLV: American Conference of Governmental Industrial Hygienists – Threshold Limit Value OSHA PEL: Occupational Safety and Health Administration – Permissible Exposure Limits NIOSH IDLH Immediately Dangerous to Life or Health

Other Exposure Guidelines: Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992). See section 15 for national exposure control parameters

Appropriate Engineering Controls

Engineering Measures: Showers / Eyewash Stations / Ventilation Systems

Individual Protection Measures, such as Personal Protective Equipment

Eye/Face Protection: If splashes are likely to occur, wear safety glasses with side shields (or goggles). None required for consumer use.

skin and body Protection: Wear protective gloves and protective clothing

Respiratory Protection: No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety practice. Take off contaminated clothing and wash before reuse. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Viscous liquid
Appearance: White
Color: No information available
Odor: Very Slight
Odor Threshold: No information available

<u>Property</u>	<u>Values</u>	<u>Remarks/Method</u>
pH	8.5	None known
Melting/freezing point	No data available	None known
Boiling point/boiling range	No data available	None known
Flash Point	No data available	None known
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		
Upper flammability limit	No data available	None known
Lower flammability limit	No data available	None known
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Specific Gravity	No data available	None known
Water Solubility	Miscible in water	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Explosive properties	No data available	
Oxidizing properties	No data available	

Other Information

Softening Point	No data available
VOC Content (%)	No data available
Particle size	No data available
Particle size distribution	No data available

SECTION 10: STABILITY AND REACTIVITY

Reactivity

No data available

Conditions to Avoid

Excessive heat

Chemical Stability

Stable under recommended storage conditions

Incompatible Materials

None known based on information supplied

Possibility of Hazardous Reactions

None under normal processing

Hazardous Decomposition Products

Carbon oxides

Hazardous Polymerization

Hazardous polymerization does not occur

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Product Information: Product does not present an acute toxicity hazard based on known or supplied information.

Inhalation: Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract. Harmful by inhalation (based on components).

Eye Contact: Specific test data for the substance or mixture is not available. Expected to be an irritant based on components. May cause redness, itching, and pain. May cause temporary eye irritation.

Skin Contact: Specific test data for the substance or mixture is not available. May cause irritation. Prolonged contact may cause redness and irritation.

Ingestion: Specific test data for the substance or mixture is not available. Ingestion may cause irritation to mucous membranes. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Titanium dioxide 13463-67-7	> 10000 mg/kg (Rat)		
Propylene Glycol 57-55-6	= 20000 mg/kg (Rat)	= 20800 mg/kg (Rabbit)	
Chlorothalonil 1897-45-6		> 10 g/kg (Rabbit)	= 310 mg/m ³ (Rat) 1 h
Polyethylene glycol branched Nonylphenyl ether 68412-54-4		= 1780 µL/kg (Rabbit)	

Information on Toxicological Effects

Symptoms: May cause redness and tearing of the eyes, coughing and/or wheezing, itching, rashes and hives.

Delayed and Immediate Effects as well as Chronic Effects from Short and Long-Term Exposure

Sensitization: May cause sensitization of susceptible persons. May cause sensitization by skin contact.

Mutagenic Effects: No information available

Carcinogenicity: The table below indicates whether each agency has listed any ingredient as a carcinogen

Chemical Name	ACGIH	IARC	NTP	OSHA
Titanium dioxide 13463-67-7		Group 2B		X
Chlorothalonil 1897-45-6		Group 2B		X

ACGIH (American Conference of Governmental Industrial Hygienists)

A2 – Suspected Human Carcinogen

IARC (International Agency for Research on Cancer)

Group 2B – Possibly Carcinogenic to Humans

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X-Present

Reproductive Toxicity, STOT Single Exposure, STOT Repeated Exposure: No information available

Chronic Toxicity: Titanium dioxide has been classified by the International Agency for Research on Cancer (IARC) as possibly carcinogenic to humans (Group 2B) by inhalation. Contains a known or suspected carcinogen.

Target Organ Effects: Eyes, respiratory system, skin, gastrointestinal tract (GI) & lungs.

Aspiration Hazard: No information available

Numerical Measures of Toxicity Product Information

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 8,711.00 mg/kg	ATEmix (inhalation-dust/mist) 2.41 mg/l
ATEmix (dermal) 21,608.00 mg/kg (ATE)	ATEmix (inhalation-vapor) 16.00 ATEmix
ATEmix (inhalation-gas) 3,118.00 ppm (4hr)	

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects

<i>Chemical Name</i>	<i>Toxicity to Algae</i>	<i>Toxicity to Fish</i>	<i>Toxicity to Microorganisms</i>	<i>Daphnia Magna (Water Flea)</i>
Propylene Glycol 57-55-6	96h EC50: = mg/L (Pseudokirchneriella Subcapitata)	96h LC50: = 51600 mg/L (Oncorhynchus mykiss) 96h LC50: 41-47 mL/L (Oncorhynchus mykiss) 96h LC50: 51400 mg/L (Pimephales promelas) 96h LC50: = 710 mg/L (Pimephales promelas)		24h EC50: > 10000 mg/L 48h EC50: > 1000 mg/L
Chlorothalonil 1897-45-6	72h EC50: = 0.57 mg/L (Desmodesmus Subspicatus) 72h EC50: = 0.0068 mg/L (Pseudokirchneriella Subcapitata)	96h LC50: = 0.012 mg/L (Oncorhynchus mykiss) 96h LC50: 0.0076 mg/L (Oncorhynchus mykiss) 96h LC50: 0.0221-0.032 mg/L (Lepomis macrochirus) 96h LC50: 0.045-0.057 mg/L (Lepomis macrochirus)		48h EC50: 0.0342-0.143 mg/L

Persistence and Degradability: No information available

Bioaccumulation

<i>Chemical Name</i>	<i>Log Pow</i>
Chlorothalonil 1897-45-6	2.9
Methylchloroisothiazolinone 26172-55-4	-0.71-0.75

Other Adverse Effects: No information available

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal Methods: This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated Packaging: Dispose of contents/containers in accordance with local regulations

California Hazardous Waste Codes: 331

SECTION 14: TRANSPORT INFORMATION

<u>DOT</u>	Not Regulated
Proper Shipping Name	Non-Regulated
Hazard Class	N/A

TDG
o data available

IATA
No data available

IMDG/IMO
No data available

SECTION 15: REGULATORY INFORMATION

International Inventories

TSCA Complies
DSL All components are listed either on the DSL or NDSL

TSCA – United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL – Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

<i>Chemical Name</i>	<i>CAS No.</i>	<i>Weight - %</i>	<i>SARA 313 – Threshold Values %</i>
Chlorothalonil	1897-45-6	0.1-1	0.1

SARA 311/312 Hazard Categories

Acute Health Hazard Yes
Chronic Health Hazard Yes

Fire Hazard No
Sudden release of pressure hazard No
Reactive Hazard No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

Chemical Name
 Titanium dioxide – 13463-67-7
 Chlorothalonil – 1897-45-6

California Proposition 65
 Carcinogen
 Carcinogen

J.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Rhode Island	Illinois
Titanium dioxide – 13463-67-4	X	X	X		
Propylene Glycol – 57-55-6	X		X		
Chlorothalonil – 1897-45-6	X	X	X	X	

International Regulations

Canada
 WHMIS Hazard Class
 D2A – Very toxic materials
 D2B – Toxic materials



SECTION 16: OTHER INFORMATION

NFPA	Health Hazards 2	Flammability 0	Instability 0	Special Hazard
HMIS	Health Hazards 2*	Flammability 0	Physical Hazard 0	Personal Protection X

Chronic Hazard Star Legend * = Chronic Health Hazard

WARNING! If you scrape, sand or remove old paint, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear NIOSH-approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and wet mop. Before you start, find out how to protect yourself and your family by contacting the National Lead Information Hotline at 1-800-424-LEAD (5323) or log on to: www.epa.gov/lead

SAFETY DATA SHEET

REVISION DATE: 01-10-2020

SUPERSEDES: 10-01-2014

SECTION 1: IDENTIFICATION OF THE PRODUCT AND SUPPLIER**PRODUCT INFORMATION**

PRODUCT: FOSTER 32-61
PRODUCT DESCRIPTION: Lockdown
INTENDED USE: Adhesive
PRODUCT IDENTIFIER: 802291PM

COMPANY INFORMATION

H.B. Fuller Construction Products Inc.
1105 S. Frontenac Street
Aurora, IL 60504
Phone: 1-800-552-6225

Medical Emergency Phone Number (24 Hours): 1-888-853-1758
Transport Emergency Phone Number (CHEMTREC): 1-800-424-9300

SECTION 2: HAZARDS IDENTIFICATION

GHS Classification: This product is not classified as hazardous under GHS criteria.
GHS Precautions:
Safety Precautions: No special precautionary measures are required. Please read the entire Safety Data Sheet for other information regarding handling of this product.
First Aid Measures: IF SWALLOWED: Do not induce vomiting. Seek medical attention if symptoms develop. IF IN EYES: Use an eye wash to remove chemical from the eye. IF ON SKIN: Wash with soap and water. IF INHALED: Remove individual to fresh air after an airborne exposure if any symptoms develop.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS #	PERCENT	Classification	Note
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Unlisted ingredients are not 'hazardous' per the Occupational Safety and Health Administration Hazard Communication Standard (29 CFR 1910.1200) and/or are not found on the Canadian Workplace Hazardous Materials Information System ingredient disclosure list. See Section 8 for exposure limit guidelines.

SECTION 4: FIRST AID MEASURES

IF IN EYES: None expected to be needed, however, use an eye wash to remove a chemical from your eye regardless of the level of hazard.

IF ON SKIN: Wash with soap and water.

IF INHALED: Remove individual to fresh air after an airborne exposure if any symptoms develop, as a precautionary measure.

IF SWALLOWED: Do not induce vomiting. Seek medical attention if symptoms develop. Provide medical care provider with this MSDS. Induced vomiting may lead to aspiration of the material into the lungs potentially causing chemical pneumonitis that may be fatal.

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SECTION 5: FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Use water spray, foam, dry chemical or carbon dioxide.
 UNUSUAL FIRE AND EXPLOSION HAZARDS: There is a possibility of pressure buildup in closed containers when heated. Water spray may be used to cool the containers.
 SPECIAL FIRE FIGHTING INSTRUCTIONS: Persons exposed to products of combustion should wear self-contained breathing apparatus and full protective equipment.
 HAZARDOUS COMBUSTION PRODUCTS: Carbon dioxide, Carbon monoxide

SECTION 6: ACCIDENTAL RELEASE MEASURES

SPECIAL PROTECTION: No adverse health effects expected from the clean-up of spilled material. Follow personal protective equipment recommendations found in Section 8 of this SDS.
 METHODS FOR CLEAN-UP: Dike if necessary, contain spill with inert absorbent and transfer to containers for disposal. Keep spilled product out of sewers, watersheds, or water systems.

Transport Emergency Phone Number (CHEMTREC): 1-800-424-9300

SECTION 7: HANDLING AND STORAGE

Handling: No special handling instructions due to toxicity. This product contains an ingredient that may release formaldehyde when in contact with strong acids.
 Storage: Store in a cool, dry place. Protect from freezing. Consult the Technical Data Sheet for specific storage instructions.

SECTION 8: E POSURE CONTROLS/PERSONAL PROTECTION

E POSURE LIMITS:

Chemical Name	Note	ACGIH E POSURE LIMITS	OSHA PEL
No data available.			

ENGINEERING CONTROL METHODS:

VENTILATION: General room ventilation might be required under normal conditions of use.
 EYE PROTECTION: Wear safety glasses when handling this product.
 SKIN PROTECTION: Not normally considered a skin hazard. Where use can result in skin contact, practice good personal hygiene. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.
 GLOVES: Not normally required. Use nitrile gloves if conditions warrant.
 RESPIRATORY PROTECTION: No respiratory protection required under normal conditions of use. Respirators should be selected by and used following requirements found in OSHA's respirator standard (29 CFR 1910.134).

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:	Liquid
COLOR:	White
ODOR:	Mild Sweet
ODOR THRESHOLD:	Not established
pH:	Not established
FREEZING/MELTING POINT (deg. C):	Not established
BOILING POINT (deg. C):	Not established
FLASH POINT:	Non flammable
EVAPORATION RATE:	Not established
FLAMMABILITY:	Not a flammable solid or gas
UPPER EXPLOSIVE LIMIT (% in air):	Not established
LOWER EXPLOSIVE LIMIT (% in air):	Not established
VAPOR PRESSURE (mm Hg):	Not established
VAPOR DENSITY:	Not established
WEIGHT PER GALLON (lbs.):	8.40
SPECIFIC GRAVITY:	1.010
SOLUBILITY:	Not established
OCTANOL/WATER COEFFICIENT:	Not established
AUTOIGNITION TEMPERATURE:	Not established
DECOMPOSITION TEMPERATURE:	Not established
VISCOSITY:	No data available.
SOLIDS (% by weight):	7.4
VOC, weight percent	0.96
VOC, U.S. EPA Method 24, less water and exempt solvents (theoretically determined)	10g/liter of material

SECTION 10: STABILITY AND REACTIVITY

STABILITY:	Stable under normal conditions.
CHEMICAL INCOMPATIBILITY:	Not established
HAZARDOUS POLYMERIZATION:	Will not occur.
HAZARDOUS DECOMPOSITION PRODUCTS:	Carbon monoxide, carbon dioxide

SECTION 11: TOXICOLOGICAL INFORMATION

Component Toxicity / Toxicology Data:

COMPONENT NAME	LD50/LC50
No data available.	

This product is a mixture. Unless noted, the information below is based on components.

Skin corrosion / irritation: No irritation hazard in normal industrial use.

Serious eye damage / irritation : No irritation hazard in normal industrial use.

Respiratory / skin sensitization: No data available.

Germ cell mutagenicity: No data available.

Carcinogenicity: No data available.

Reproductive toxicity: No data available.

Specific target organ toxicity-single exposure: No data available.

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Respiratory irritation / Narcotic effects: No data available.
Specific target organ toxicity-repeated exposure: No data available.
Target organs potentially affected by exposure: No organs known to be damaged from exposure to this product.
Aspiration hazard: Not an aspiration hazard.

Medical Conditions Aggravated by Exposure: No medical conditions affected by exposure.

SECTION 12: ECOLOGICAL INFORMATION

OVERVIEW: No ecological information available for this product.
MOBILITY: No data available.
PERSISTENCE: No data available.
BIOACCUMULATION: No data available.

This product has not been tested for ecological effects. Relevant information for components is listed below:

Component:	Ecotoxicity values:
No data available.	Acute Toxicity (Fish): Acute Toxicity (Daphnia): Acute Toxicity (Algae):

SECTION 13: DISPOSAL CONSIDERATIONS

To the best of our knowledge, this product does not meet the definition of hazardous waste under the U.S. EPA Hazardous Waste Regulations 40 CFR 261. Solidify and dispose of in an approved landfill. Consult state, local or provincial authorities for more restrictive requirements.

SECTION 14: TRANSPORT INFORMATION

Consult Bill of Lading for transportation information.

US DOT: NOT REGULATED
IATA: NOT REGULATED

SECTION 15: REGULATORY INFORMATION**INVENTORY STATUS**

U.S. EPA TSCA: This product is in compliance with the Toxic Substances Control Act's Inventory requirements.
CANADIAN CEPA DSL: The components of this product are included on the DSL or are exempt from DSL requirements.
EUROPEAN REACH: As a result of the introduction of REACH into Europe, this product cannot be imported into Europe unless the REACH requirements are met.
AUSTRALIA AICS: This product is in compliance with the Australian Inventory of Chemical Substances requirements.
JAPAN ENCS: This product is in compliance with the Japanese Existing and New Chemical Substances requirements.
CHINA IECSC INVENTORY: This product is in compliance with the Inventory of Existing Chemical Substances in China (IECSC) requirements.

If you need more information about the inventory status of this product call 651-236-5858.

This product may contain chemical substances that are regulated for export by various government agencies (such as the Environmental Protection Agency, the Bureau of Industry and Security, or the Drug Enforcement

SAFETY DATA SHEET

Administration, among others). Before exporting this product from the USA or Canada, we recommend you contact us at reg.request@hbfuller.com to request an export review.

This product contains a chemical substance that is subject to a Significant New Use Rule (SNUR) under Section 5(a)(2) of TSCA:

.alpha.-(Nonylphenyl)-.omega.-hydroxypoly(oxy-1,2-ethanediyl)

79 FR 59186, Oct 1, 2014 (proposed rule, listed under .alpha.-(Nonylphenyl)-.omega.-hydroxypoly(oxy-1,2-ethanediyl))

FEDERAL REPORTING

EPA SARA Title III Section 313

Unless listed below, this product does not contain toxic chemical(s) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR part 372. EPA has advised that when a percentage range is listed the midpoint may be used to fulfill reporting obligations.

Chemical Name	CAS#	%
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STATE REPORTING

Proposition 65, The Safe Drinking Water and Toxic Enforcement Act of 1986:

Unless listed below, this product does not contain known levels of any chemical known to the State of California to cause cancer or reproductive harm.

Chemical Name/List	CAS	Percent
Methyl isobutyl ketone (Carcinogen)	108-10-1	0.1 - 1
1,3-Butadiene (Carcinogen)	106-99-0	0.1 - 1
Styrene (Carcinogen)	100-42-5	0.1 - 1
Methanol (Developmental toxin)	67-56-1	0.1 - 1
Ethylene glycol (Developmental toxin)	107-21-1	0.1 - 1
Methyl isobutyl ketone (Developmental toxin)	108-10-1	0.1 - 1
1,3-Butadiene (Developmental toxin)	106-99-0	0.1 - 1
1,3-Butadiene (Female reproductive toxin)	106-99-0	0.1 - 1
1,3-Butadiene (Male reproductive toxin)	106-99-0	0.1 - 1

Substances of Very High Concern (SVHC) Content:

Unless listed below, this product does not contain SVHC's at 0.1% or greater, as of the version date of this SDS.
4-Nonylphenol, branched, ethoxylated

SECTION 16: OTHER INFORMATION

SDS VERSION DATE: 01-10-2020

This Safety Data Sheet is prepared to comply with the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200) and the Canadian Workplace Hazardous Materials Information System (WHMIS).

HMIS RATING: HEALTH -- 0 FLAMMABILITY -- 0 REACTIVITY -- 0

See SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for personal protective equipment recommendations.

Prepared by: The Global Regulatory Department
Phone: 651-236-5842

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The information and recommendations set forth herein are believed to be accurate. Because some of the information is derived from information provided to H.B. Fuller Construction Products, Inc. from its suppliers, and because H.B. Fuller Construction Products, Inc. has no control over the conditions of handling and use, H.B. Fuller Construction Products, Inc. makes no warranty, expressed or implied, regarding the accuracy of the data or the results to be obtained from the use thereof. The information is supplied solely for your information and consideration, and H.B. Fuller Construction Products, Inc. assumes no responsibility for use or reliance thereon. It is the responsibility of the user of H.B. Fuller Construction Products, Inc. products to comply with all applicable federal, state and local laws and regulations.

SAFETY DATA SHEET

REVISION DATE: 03-13-2017

SUPERSEDES: 07-12-2016

SECTION 1: IDENTIFICATION OF THE PRODUCT AND SUPPLIER**PRODUCT INFORMATION**

PRODUCT: FOSTER 40-20
PRODUCT DESCRIPTION: Coating
INTENDED USE: Coating
PRODUCT IDENTIFIER: 827566PM

COMPANY INFORMATION

H.B. Fuller Construction Products Inc.
 1105 S. Frontenac Street
 Aurora, IL 60504
 Phone: 1-800-552-6225

Medical Emergency Phone Number (24 Hours): 1-888-853-1758
 Transport Emergency Phone Number (CHEMTREC): 1-800-424-9300

SECTION 2: HAZARDS IDENTIFICATION**GHS Hazard Symbols:**

GHS Signal Word: Warning
GHS Classification: Skin Sensitisation Category 1; Hazardous to the aquatic environment - Acute Category 2; Hazardous to the aquatic environment - Chronic Category 2
GHS Hazard Phrases: May cause an allergic skin reaction.; Toxic to aquatic life with long lasting effects.
GHS Precautions:
Safety Precautions: Avoid breathing dust/fume/gas/mist/vapours/spray. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.
First Aid Measures: IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. Collect spillage.
Disposal: Dispose of contents/container in accordance with local/regional/national/international regulation for hazardous wastes.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS #	PERCENT	Classification	Note
Calcium carbonate	471-34-1	5 - 10		* (see below)
Titanium dioxide	13463-67-7	5 - 10	Carc. 2; H351	* (see below)
Zinc oxide	1314-13-2	1 - 5	Aquatic Acute 1; H400 Aquatic Chronic 1; H410	
Mineral oil	Proprietary	0.1 - 1		
Iodo-2-propynyl butylcarbamate	55406-53-6	0.1 - 1	Aquatic Acute 1; H400 Acute Tox. 4; H332	

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			Acute Tox. 4; H302 Eye Dam. 1; H318 Skin Sens. 1; H317 STOT SE 3; H335, H336	
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*This product contains one or more materials that may be hazardous when present as an airborne dust. During normal handling of the product, the material is encapsulated within the product and will not present an exposure risk. Once the product has reached its final state and is abraded or disturbed, dusting and exposure may occur. This product contains titanium dioxide, which is hazardous when present as an airborne dust. As provided, and during normal use of this product, this substance is encapsulated within the product. As such, it is considered to be inextricably bound, and not readily available for exposure.

Unlisted ingredients are not 'hazardous' per the Occupational Safety and Health Administration Hazard Communication Standard (29 CFR 1910.1200) and/or are not found on the Canadian Workplace Hazardous Materials Information System ingredient disclosure list. See Section 8 for exposure limit guidelines.

SECTION 4: FIRST AID MEASURES

IF IN EYES: Use an eye wash to remove a chemical from your eye regardless of the level of hazard. Flush the affected eye for at least twenty minutes. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Seek medical advice after flushing.

IF ON SKIN: Wash with soap and water. Get medical attention if irritation develops or persists.

IF INHALED: Remove to fresh air. Call a physician if symptoms persist.

IF SWALLOWED: Do not induce vomiting. Seek medical attention if symptoms develop. Provide medical care provider with this MSDS. Induced vomiting may lead to aspiration of the material into the lungs potentially causing chemical pneumonitis that may be fatal.

SECTION 5: FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Use water spray, foam, dry chemical or carbon dioxide.

UNUSUAL FIRE AND EXPLOSION HAZARDS: There is a possibility of pressure buildup in closed containers when heated. Water spray may be used to cool the containers.

SPECIAL FIRE FIGHTING INSTRUCTIONS: Persons exposed to products of combustion should wear self-contained breathing apparatus and full protective equipment.

HAZARDOUS COMBUSTION PRODUCTS: Carbon dioxide, Carbon monoxide Metal fumes

SECTION 6: ACCIDENTAL RELEASE MEASURES

SPECIAL PROTECTION: Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section 8 of this MSDS. Additional precautions may be necessary based on special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred.

METHODS FOR CLEAN-UP: Dike if necessary, contain spill with inert absorbent and transfer to containers for disposal. Keep spilled product out of sewers, watersheds, or water systems.

Transport Emergency Phone Number (CHEMTREC): 1-800-424-9300

SECTION 7: HANDLING AND STORAGE

SAFETY DATA SHEET

Handling: Avoid contacting and avoid breathing the material. Use only in a well ventilated area.

Storage: Store in a cool, dry place. Protect from freezing.
Consult the Technical Data Sheet for specific storage instructions.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMITS:

Chemical Name	Note	ACGIH EXPOSURE LIMITS	OSHA PEL
Calcium carbonate	* (see below)	No data available.	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)
Titanium dioxide	* (see below)	10 mg/m ³ TWA	15 mg/m ³ TWA (total dust)
Zinc oxide		2 mg/m ³ TWA (respirable fraction) 10 mg/m ³ STEL (respirable fraction)	5 mg/m ³ TWA (fume); 15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)
Mineral oil		5 mg/m ³ TWA (excluding metal working fluids, inhalable fraction)	5 mg/m ³ TWA (as mist)

*This product contains one or more materials that may be hazardous when present as an airborne dust. During normal handling of the product, the material is encapsulated within the product and will not present an exposure risk. Once the product has reached its final state and is abraded or disturbed, dusting and exposure may occur. This product contains titanium dioxide, which is hazardous when present as an airborne dust. As provided, and during normal use of this product, this substance is encapsulated within the product. As such, it is considered to be inextricably bound, and not readily available for exposure.

ENGINEERING CONTROL METHODS:

VENTILATION: General room ventilation might be required under normal conditions of use.

EYE PROTECTION: Wear safety glasses when handling this product.

SKIN PROTECTION: Not normally required. Wear chemically resistant gloves to prevent prolonged or repeated contact.

GLOVES: Nitrile

RESPIRATORY PROTECTION: No respiratory protection required under normal conditions of use. Respirators should be selected by and used following requirements found in OSHA's respirator standard (29 CFR 1910.134).

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:	Liquid
COLOR:	White
ODOR:	Mild Sweet
ODOR THRESHOLD:	Not established
pH:	Not established
FREEZING/MELTING POINT (deg. C):	Not established
BOILING POINT (deg. C):	Not established
FLASH POINT:	Non flammable
EVAPORATION RATE:	Not established
FLAMMABILITY:	Not a flammable solid or gas
UPPER EXPLOSIVE LIMIT (% in air):	Not established
LOWER EXPLOSIVE LIMIT (% in air):	Not established
VAPOR PRESSURE (mm Hg):	Not established

SAFETY DATA SHEET

VAPOR DENSITY:	Not established
WEIGHT PER GALLON (lbs.):	11.90
SPECIFIC GRAVITY:	1.430
SOLUBILITY:	Not established
OCTANOL/WATER COEFFICIENT:	Not established
AUTOIGNITION TEMPERATURE:	Not established
DECOMPOSITION TEMPERATURE:	Not established
VISCOSITY:	No data available.
SOLIDS (% by weight):	69.0
VOC, weight percent	1.76
VOC, U.S. EPA Method 24, less water and exempt solvents (theoretically determined)	42g/liter of material

SECTION 10: STABILITY AND REACTIVITY

STABILITY:	Stable under normal conditions.
CHEMICAL INCOMPATIBILITY:	Not established
HAZARDOUS POLYMERIZATION:	Will not occur.
HAZARDOUS DECOMPOSITION PRODUCTS:	Carbon monoxide, carbon dioxide Metal fumes

SECTION 11: TOXICOLOGICAL INFORMATION

Component Toxicity / Toxicology Data:

COMPONENT NAME	LD50/LC50
Barium compound	Dermal LD50 Rabbit > 2,000.00 mg/kg
2,2,4-Trimethyl-1,3-pentanediolmonoisobutyrate	Oral LD50 Rat 3,200 mg/kg

This product is a mixture. Unless noted, the information below is based on components.

Skin corrosion / irritation: No irritation hazard in normal industrial use.

Serious eye damage / irritation :No irritation hazard in normal industrial use.

Respiratory / skin sensitization: No data available.

Germ cell mutagenicity: No data available.

Carcinogenicity: Contains a material that is suspected of causing cancer.

Reproductive toxicity: No data available.

Specific target organ toxicity-single exposure: No data available.

Respiratory irritation / Narcotic effects: No data available.

Specific target organ toxicity-repeated exposure: No data available.

Target organs potentially affected by exposure: Lungs

Aspiration hazard: Not an aspiration hazard.

Medical Conditions Aggravated by Exposure: Lung disease

SECTION 12: ECOLOGICAL INFORMATION

OVERVIEW:	No ecological information available for this product.
MOBILITY:	No data available.
PERSISTENCE:	No data available.
BIOACCUMULATION:	No data available.

SAFETY DATA SHEET

This product has not been tested for ecological effects. Relevant information for components is listed below:

Component:	Ecotoxicity values:
2,2,4-Trimethyl-1,3-pentanediolmonoisobutyrate	Acute Toxicity (Fish): 96 Hr LC50 Pimephales promelas: 30 mg/L Acute Toxicity (Daphnia): Not established Acute Toxicity (Algae): 72 Hr EC50 Pseudokirchneriella subcapitata: 18.4 mg/L

SECTION 13: DISPOSAL CONSIDERATIONS

To the best of our knowledge, this product does not meet the definition of hazardous waste under the U.S. EPA Hazardous Waste Regulations 40 CFR 261. Solidify and dispose of in an approved landfill. Consult state, local or provincial authorities for more restrictive requirements.

SECTION 14: TRANSPORT INFORMATION

Consult Bill of Lading for transportation information.

US DOT:	NOT REGULATED
IATA:	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (ZINC OXIDE), 9, PGIII, MARINE POLLUTANT (PACKAGES <5 L NOT REGULATED, IATA 4.4, SP A197).
IMDG:	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (ZINC OXIDE), 9, III, MARINE POLLUTANT, (PACKAGES <5 L NOT REGULATED, IMDG 3.3 SP 969)

SECTION 15: REGULATORY INFORMATION

INVENTORY STATUS

U.S. EPA TSCA:	This product is in compliance with the Toxic Substances Control Act's Inventory requirements.
CANADIAN CEPA DSL:	The components of this product are included on the DSL or are exempt from DSL requirements.
EUROPEAN REACH:	As a result of the introduction of REACH into Europe, this product cannot be imported into Europe unless the REACH requirements are met.
AUSTRALIA AICS:	This product contains a component that is not on the Australian Inventory (AICS).
CHINA IECSC INVENTORY:	This product is in compliance with the Inventory of Existing Chemical Substances in China (IECSC) requirements.

If you need more information about the inventory status of this product call 651-236-5858.

This product may contain chemical substances that are regulated for export by various government agencies (such as the Environmental Protection Agency, the Bureau of Industry and Security, or the Drug Enforcement Administration, among others). Before exporting this product from the USA or Canada, we recommend you contact us at reg.request@hbfuller.com to request an export review.

This product contains a chemical substance that is subject to a Significant New Use Rule (SNUR) under Section 5(a)(2) of TSCA:	.alpha.(Nonylphenyl)-.omega.-hydroxy-poly(oxy-1,2-ethanediyl)
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FEDERAL REPORTING

SAFETY DATA SHEET

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EPA SARA Title III Section 313

Unless listed below, this product does not contain toxic chemical(s) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR part 372. EPA has advised that when a percentage range is listed the midpoint may be used to fulfill reporting obligations.

Chemical Name	CAS#	%
Barium compounds	13701-59-2	5 - 10
Zinc compounds	1314-13-2	1 - 5
3-Iodo-2-propynyl butylcarbamate	55406-53-6	0.1 - 1

STATE REPORTING

Proposition 65, The Safe Drinking Water and Toxic Enforcement Act of 1986:

Unless listed below, this product does not contain known levels of any chemical known to the State of California to cause cancer or reproductive harm.

Chemical Name/List		CAS	Percent
Titanium dioxide	(Carcinogen)	13463-67-7	5 - 10
Quartz	(Carcinogen)	14808-60-7	0.1 - 1
Lead	(Carcinogen)	7439-92-1	0.001 - 0.01
Cadmium	(Carcinogen)	7440-43-9	0.001 - 0.01
Formaldehyde	(Carcinogen)	50-00-0	0.001 - 0.01
Arsenic compounds (inorganic)	(Carcinogen)	7440-38-2	< 10 ppm
Ethyl acrylate	(Carcinogen)	140-88-5	< 10 ppm
Lead compounds	(Carcinogen)		< 10 ppm
Lead	(Developmental toxin)	7439-92-1	0.001 - 0.01
Cadmium	(Developmental toxin)	7440-43-9	0.001 - 0.01
Lead	(Female reproductive toxin)	7439-92-1	0.001 - 0.01
Lead	(Male reproductive toxin)	7439-92-1	0.001 - 0.01
Cadmium	(Male reproductive toxin)	7440-43-9	0.001 - 0.01

Substances of Very High Concern (SVHC) Content:

Unless listed below, this product does not contain SVHC's at 0.1% or greater, as of the version date of this SDS. tert-Octylphenol, ethoxylated

SECTION 16: OTHER INFORMATION

SDS VERSION DATE: 03-13-2017

This Safety Data Sheet is prepared to comply with the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200) and the Canadian Workplace Hazardous Materials Information System (WHMIS).

HMIS RATING: HEALTH -- 2 FLAMMABILITY -- 0 REACTIVITY -- 0

See SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for personal protective equipment recommendations.

Prepared by: The Global Regulatory Department

Phone: 651-236-5842

SAFETY DATA SHEET

The information and recommendations set forth herein are believed to be accurate. Because some of the information is derived from information provided to H.B. Fuller Construction Products, Inc. from its suppliers, and because H.B. Fuller Construction Products, Inc. has no control over the conditions of handling and use, H.B. Fuller Construction Products, Inc. makes no warranty, expressed or implied, regarding the accuracy of the data or the results to be obtained from the use thereof. The information is supplied solely for your information and consideration, and H.B. Fuller Construction Products, Inc. assumes no responsibility for use or reliance thereon. It is the responsibility of the user of H.B. Fuller Construction Products, Inc. products to comply with all applicable federal, state and local laws and regulations.

SAFETY DATA SHEET

REVISION DATE: 09-17-2019

SUPERSEDES: 01-25-2016

SECTION 1: IDENTIFICATION OF THE PRODUCT AND SUPPLIER**PRODUCT INFORMATION**

PRODUCT: FOSTER 40-80
PRODUCT DESCRIPTION: Disinfectant
INTENDED USE: Cleaner
PRODUCT IDENTIFIER: 802320PM

COMPANY INFORMATION

H.B. Fuller Construction Products Inc.
1105 S. Frontenac Street
Aurora, IL 60504
Phone: 1-800-552-6225

Medical Emergency Phone Number (24 Hours): 1-888-853-1758
Transport Emergency Phone Number (CHEMTREC): 1-800-424-9300

SECTION 2: HAZARDS IDENTIFICATION

GHS Classification: This product is not classified as hazardous under GHS criteria.
GHS Precautions:
Safety Precautions: No special precautionary measures are required. Please read the entire Safety Data Sheet for other information regarding handling of this product.
First Aid Measures: IF SWALLOWED: Do not induce vomiting. Seek medical attention if symptoms develop. IF IN EYES: Use an eye wash to remove chemical from the eye. IF ON SKIN: Wash with soap and water. IF INHALED: Remove individual to fresh air after an airborne exposure if any symptoms develop.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS #	PERCENT	Classification	Note
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Unlisted ingredients are not 'hazardous' per the Occupational Safety and Health Administration Hazard Communication Standard (29 CFR 1910.1200) and/or are not found on the Canadian Workplace Hazardous Materials Information System ingredient disclosure list. See Section 8 for exposure limit guidelines.

SECTION 4: FIRST AID MEASURES

IF IN EYES: Flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention.

IF ON SKIN: Wash with soap and water.

IF INHALED: Remove individual to fresh air after an airborne exposure if any symptoms develop, as a precautionary measure.

IF SWALLOWED: Do not induce vomiting. Seek medical attention if symptoms develop. Provide medical care provider with this MSDS. Induced vomiting may lead to aspiration of the material into the lungs potentially causing chemical pneumonitis that may be fatal.

SECTION 5: FIRE FIGHTING MEASURES

SAFETY DATA SHEET

EXTINGUISHING MEDIA: Use water spray, foam, dry chemical or carbon dioxide.
 UNUSUAL FIRE AND EXPLOSION HAZARDS: There is a possibility of pressure buildup in closed containers when heated. Water spray may be used to cool the containers.
 SPECIAL FIRE FIGHTING INSTRUCTIONS: Persons exposed to products of combustion should wear self-contained breathing apparatus and full protective equipment.
 HAZARDOUS COMBUSTION PRODUCTS: Carbon dioxide, Carbon monoxide

SECTION 6: ACCIDENTAL RELEASE MEASURES

SPECIAL PROTECTION: No adverse health effects expected from the clean-up of spilled material. Follow personal protective equipment recommendations found in Section 8 of this SDS.
 METHODS FOR CLEAN-UP: Dike if necessary, contain spill with inert absorbent and transfer to containers for disposal. Keep spilled product out of sewers, watersheds, or water systems.

Transport Emergency Phone Number (CHEMTREC): 1-800-424-9300

SECTION 7: HANDLING AND STORAGE

Handling: No special handling instructions due to toxicity.

Storage: Store in a cool, dry place. Protect from freezing. Consult the Technical Data Sheet for specific storage instructions.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMITS:

Chemical Name	Note	ACGIH EXPOSURE LIMITS	OSHA PEL
No data available.			

ENGINEERING CONTROL METHODS:

VENTILATION: General room ventilation might be required under normal conditions of use.
 EYE PROTECTION: Wear safety glasses with side shields when handling this product. Wear additional eye protection such as chemical splash goggles and/or face shield when the possibility exists for eye contact with splashing or spraying liquid, or airborne material. Have an eye wash station available.
 SKIN PROTECTION: Not normally considered a skin hazard. Where use can result in skin contact, practice good personal hygiene. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.
 GLOVES: Not normally required. Use nitrile gloves if conditions warrant.
 RESPIRATORY PROTECTION: No respiratory protection required under normal conditions of use. Respirators should be selected by and used following requirements found in OSHA's respirator standard (29 CFR 1910.134).

SAFETY DATA SHEET

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:	Liquid
COLOR:	Light Green
ODOR:	Fragrant
ODOR THRESHOLD:	Not established
pH:	9.7
FREEZING/MELTING POINT (deg. C):	Not established
BOILING POINT (deg. C):	Not established
FLASH POINT:	Non flammable
EVAPORATION RATE:	Not established
FLAMMABILITY:	Not a flammable solid or gas
UPPER EXPLOSIVE LIMIT (% in air):	Not established
LOWER EXPLOSIVE LIMIT (% in air):	Not established
VAPOR PRESSURE (mm Hg):	Not established
VAPOR DENSITY:	Not established
WEIGHT PER GALLON (lbs.):	8.32
SPECIFIC GRAVITY:	1.000
SOLUBILITY:	Not established
OCTANOL/WATER COEFFICIENT:	Not established
AUTOIGNITION TEMPERATURE:	Not established
DECOMPOSITION TEMPERATURE:	Not established
VISCOSITY:	No data available.
SOLIDS (% by weight):	0.2
VOC, weight percent	0.02
VOC, U.S. EPA Method 24, less water and exempt solvents (theoretically determined)	39.7g/liter of material

SECTION 10: STABILITY AND REACTIVITY

STABILITY:	Stable under normal conditions.
CHEMICAL INCOMPATIBILITY:	Not established
HAZARDOUS POLYMERIZATION:	Will not occur.
HAZARDOUS DECOMPOSITION PRODUCTS:	Carbon monoxide, carbon dioxide

SECTION 11: TOXICOLOGICAL INFORMATION**Component Toxicity / Toxicology Data:**

COMPONENT NAME	LD50/LC50
No data available.	

This product is a mixture. Unless noted, the information below is based on components.

Skin corrosion / irritation: No irritation hazard in normal industrial use.

Serious eye damage / irritation :Can cause moderate irritation, tearing and reddening, but not likely to permanently injure eye tissue.

Respiratory / skin sensitization: No data available.

Germ cell mutagenicity: No data available.

Carcinogenicity: No data available.

Reproductive toxicity: No data available.

Specific target organ toxicity-single exposure: No data available.

SAFETY DATA SHEET

Respiratory irritation / Narcotic effects: No data available.
Specific target organ toxicity-repeated exposure: No data available.
Target organs potentially affected by exposure: No organs known to be damaged from exposure to this product.
Aspiration hazard: Not an aspiration hazard.

Medical Conditions Aggravated by Exposure: No medical conditions affected by exposure.

SECTION 12: ECOLOGICAL INFORMATION

OVERVIEW: No ecological information available for this product.
MOBILITY: No data available.
PERSISTENCE: No data available.
BIOACCUMULATION: No data available.

This product has not been tested for ecological effects. Relevant information for components is listed below:

Component:	Ecotoxicity values:
No data available.	Acute Toxicity (Fish): Acute Toxicity (Daphnia): Acute Toxicity (Algae):

SECTION 13: DISPOSAL CONSIDERATIONS

To the best of our knowledge, this product does not meet the definition of hazardous waste under the U.S. EPA Hazardous Waste Regulations 40 CFR 261. Solidify and dispose of in an approved landfill. Consult state, local or provincial authorities for more restrictive requirements.

SECTION 14: TRANSPORT INFORMATION

Consult Bill of Lading for transportation information.

US DOT: NOT REGULATED
IATA: NOT REGULATED
IMDG: NOT REGULATED

SECTION 15: REGULATORY INFORMATION**INVENTORY STATUS**

U.S. EPA TSCA: This product is in compliance with the Toxic Substances Control Act's Inventory requirements.
CANADIAN CEPA DSL: The components of this product are included on the DSL or are exempt from DSL requirements.
EUROPEAN REACH: As a result of the introduction of REACH into Europe, this product cannot be imported into Europe unless the REACH requirements are met.
AUSTRALIA AICS: This product is in compliance with the Australian Inventory of Chemical Substances requirements.
KOREAN TCCL: This product is in compliance with the Korean Existing Chemicals List requirements.

If you need more information about the inventory status of this product call 651-236-5858.

This product may contain chemical substances that are regulated for export by various government agencies (such as the Environmental Protection Agency, the Bureau of Industry and Security, or the Drug Enforcement Administration, among others). Before exporting this product from the USA or Canada, we recommend you contact us at reg.request@hbfuller.com to request an export review.

SAFETY DATA SHEET**FEDERAL REPORTING**

EPA SARA Title III Section 313

Unless listed below, this product does not contain toxic chemical(s) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR part 372. EPA has advised that when a percentage range is listed the midpoint may be used to fulfill reporting obligations.

Chemical Name	CAS#	%
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STATE REPORTING

Proposition 65, The Safe Drinking Water and Toxic Enforcement Act of 1986:

Unless listed below, this product does not contain known levels of any chemical known to the State of California to cause cancer or reproductive harm.

Chemical Name/List	CAS	Percent
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Substances of Very High Concern (SVHC) Content:

Unless listed below, this product does not contain SVHC's at 0.1% or greater, as of the version date of this SDS.

SECTION 16: OTHER INFORMATION

SDS VERSION DATE: 09-17-2019

This Safety Data Sheet is prepared to comply with the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200) and the Canadian Workplace Hazardous Materials Information System (WHMIS).

HMIS RATING: HEALTH -- 0 FLAMMABILITY -- 0 REACTIVITY -- 0

See SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for personal protective equipment recommendations.

Prepared by: The Global Regulatory Department

Phone: 651-236-5842

The information and recommendations set forth herein are believed to be accurate. Because some of the information is derived from information provided to H.B. Fuller Construction Products, Inc. from its suppliers, and because H.B. Fuller Construction Products, Inc. has no control over the conditions of handling and use, H.B. Fuller Construction Products, Inc. makes no warranty, expressed or implied, regarding the accuracy of the data or the results to be obtained from the use thereof. The information is supplied solely for your information and consideration, and H.B. Fuller Construction Products, Inc. assumes no responsibility for use or reliance thereon. It is the responsibility of the user of H.B. Fuller Construction Products, Inc. products to comply with all applicable federal, state and local laws and regulations.

Safety Data Sheet Gasoline, Unleaded

NFPA: Flammability



SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name	: Gasoline, Unleaded		
Synonyms	: Blend of Highly Flammable Petroleum Distillates, Regular, Mid-Grade, Premium, 888100008809		
SDS Number	: 888100008809	Version	: 1.1
Product Use Description	: Fuel		
Company	: For: Tesoro Refining & Marketing Co. 19100 Ridgewood Parkway, San Antonio, TX 78259		
Tesoro Call Center	: (877) 783-7676	Chemtrec (Emergency Contact)	: (800) 424-9300

SECTION 2. HAZARDS IDENTIFICATION

Classifications	: Flammable Liquid – Category 1 or 2 depending on formulation. Aspiration Hazard – Category 1 Carcinogenicity – Category 2 Specific Target Organ Toxicity (Repeated Exposure) – Category 2 Specific Target Organ Toxicity (Single Exposure) – Category 3 Skin Irritation – Category 2 Eye Irritation – Category 2B Chronic Aquatic Toxicity – Category 2
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Pictograms



Signal Word

: **Danger**

Hazard Statements

Extremely flammable liquid and vapor.
May be fatal if swallowed and enters airways – do not siphon gasoline by mouth.
Suspected of causing blood cancer if repeated over-exposure by inhalation and/or skin contact occurs.
May cause damage to liver, kidneys and nervous system by repeated and prolonged inhalation or skin contact. Causes eye irritation. Can be absorbed through skin.
May cause drowsiness or dizziness. Extreme exposure such as intentional inhalation may cause unconsciousness, asphyxiation and death.
Repeated or prolonged skin contact can cause irritation and dermatitis.

Harmful to aquatic life.

Precautionary statements

Prevention

- : Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Keep away from heat, sparks, open flames, welding and hot surfaces.
- No smoking.
- Keep container tightly closed.
- Ground and/or bond container and receiving equipment.
- Use explosion-proof electrical equipment.
- Use only non-sparking tools (if tools are used in flammable atmosphere).
- Take precautionary measures against static discharge.
- Wear gloves, eye protection and face protection (as needed to prevent skin and eye contact with liquid).
- Wash hands or liquid-contacted skin thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Do not breathe vapors.
- Use only outdoors or in a well-ventilated area.

Response

- : In case of fire: Use dry chemical, CO₂, water spray or fire fighting foam to extinguish.
- If swallowed: Immediately call a poison center, doctor, hospital emergency room, medical clinic or 911. Do NOT induce vomiting. Rinse mouth.
- If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- If in eye: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- If skin or eye irritation persists, get medical attention.
- If inhaled: Remove person to fresh air and keep comfortable for breathing. Get medical attention if you feel unwell.

Storage

- : Store in a well ventilated place. Keep cool. Store locked up. Keep container tightly closed. Use only approved containers. Some containers not approved for gasoline may dissolve and release flammable gasoline liquid and vapors.

Disposal

- : Dispose of contents/containers to approved disposal site in accordance with local, regional, national, and/or international regulations.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No.	Weight %
Gasoline, natural; Low boiling point naphtha	8006-61-9	10 - 30%
Toluene	108-88-3	10 - 30%
Xylene	1330-20-7	10 - 30%
Ethanol; ethyl alcohol	64-17-5	0-8.2%
Trimethylbenzene	25551-13-7	1 - 5%
Isopentane; 2-methylbutane	78-78-4	1 - 5%

Naphthalene	91-20-3	1 - 5%
Benzene	71-43-2	Less than 1.3%
Pentane	109-66-0	1 - 5%
Cyclohexane	110-82-7	1 - 5%
Ethylbenzene	100-41-4	1 - 5%
Butane	106-97-8	1 - 20%
Heptane [and isomers]	142-82-5	0.5 - 0.75%
N-hexane	110-54-3	0.5 - 0.75%

SECTION 4. FIRST AID MEASURES

Inhalation	: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention immediately.
Skin contact	: In case of contact, immediately flush skin with plenty of water. Take off contaminated clothing and shoes immediately. Wash contaminated clothing before re-use. Contaminated leather, particularly footwear, must be discarded. Note that contaminated clothing may be a fire hazard. Seek medical advice if symptoms persist or develop.
Eye contact	: Remove contact lenses. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Seek medical advice if symptoms persist or develop.
Ingestion	: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Obtain medical attention.
Notes to physician	: Symptoms: Dizziness, Discomfort, Headache, Nausea, Kidney disorders, Liver disorders. Aspiration may cause pulmonary edema and pneumonitis. Swallowing gasoline is more likely to be fatal for small children than adults, even if aspiration does not occur.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	: SMALL FIRES: Any extinguisher suitable for Class B fires, dry chemical, CO ₂ , water spray or fire fighting foam. LARGE FIRES: Water spray, fog or fire fighting foam. Water may be ineffective for fighting the fire, but may be used to cool fire-exposed containers. Keep containers and surroundings cool with water spray.
Specific hazards during fire fighting	: Extremely flammable liquid and vapor. This material is combustible/flammable and is sensitive to fire, heat, and static discharge.
Special protective equipment for fire-fighters	: Firefighting activities that may result in potential exposure to high heat, smoke or toxic by-products of combustion should require NIOSH/MSHA- approved pressure-demand self-contained breathing apparatus with full facepiece and full protective clothing.

Further information : Isolate area around container involved in fire. Cool tanks, shells, and containers exposed to fire and excessive heat with water. For massive fires the use of unmanned hose holders or monitor nozzles may be advantageous to further minimize personnel exposure. Major fires may require withdrawal, allowing the tank to burn. Large storage tank fires typically require specially trained personnel and equipment to extinguish the fire, often including the need for properly applied fire fighting foam. Exposure to decomposition products may be a hazard to health. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions : Evacuate personnel to safe areas. Ventilate the area. Remove all sources of ignition. Response and clean-up crews must be properly trained and must utilize proper protective equipment (see Section 8).

Environmental precautions : Discharge into the environment must be avoided. If the product contaminates rivers and lakes or drains inform respective authorities.

Methods for cleaning up : Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling : Keep away from fire, sparks and heated surfaces. No smoking near areas where material is stored or handled. The product should only be stored and handled in areas with intrinsically safe electrical classification.

Hydrocarbon liquids including this product can act as a non-conductive flammable liquid (or static accumulators), and may form ignitable vapor-air mixtures in storage tanks or other containers. Precautions to prevent static-initated fire or explosion during transfer, storage or handling, include but are not limited to these examples:

- (1) Ground and bond containers during product transfers. Grounding and bonding may not be adequate protection to prevent ignition or explosion of hydrocarbon liquids and vapors that are static accumulators.
- (2) Special slow load procedures for "switch loading" must be followed to avoid the static ignition hazard that can exist when higher flash point material (such as fuel oil or diesel) is loaded into tanks previously containing low flash point products (such gasoline or naphtha).
- (3) Storage tank level floats must be effectively bonded.

For more information on precautions to prevent static-initated fire or explosion, see NFPA 77, Recommended Practice on Static Electricity (2007), and API Recommended Practice 2003, Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents (2008).

Conditions for safe storage, including incompatibilities : Keep away from flame, sparks, excessive temperatures and open flame. Use approved containers. Keep containers closed and clearly labeled. Empty or partially full product containers or vessels may contain explosive vapors. Do not pressurize, cut, heat, weld or expose containers to sources of ignition. Store in a well-ventilated area. The storage area should comply with NFPA 30 "Flammable and Combustible Liquid Code". The cleaning of tanks previously containing this product should follow API Recommended Practice (RP) 2013 "Cleaning Mobile Tanks In Flammable and Combustible Liquid Service" and API RP 2015 "Cleaning Petroleum Storage Tanks".

Reports suggest that government-mandated ethanol, if present, may not be compatible with fiberglass gasoline tanks. Ethanol may dissolve fiberglass resin, causing engine damage and possibly allow leakage of explosive gasoline.

Keep away from food, drink and animal feed. Incompatible with oxidizing agents. Incompatible with acids.

No decomposition if stored and applied as directed. Emergency eye wash capability should be available in the near proximity to operations presenting a potential splash exposure. Store only in containers approved and labeled for gasoline.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

List	Components	CAS-No.	Type:	Value
OSHA	Benzene	71-43-2	TWA	1 ppm
		71-43-2	STEL	5 ppm
		71-43-2	OSHA_ACT	0.5 ppm
OSHA Z1	Xylene	1330-20-7	PEL	100 ppm 435 mg/m3
	Ethanol; Ethyl alcohol	64-17-5	PEL	1,000 ppm 1,900 mg/m3
	Naphthalene	91-20-3	PEL	10 ppm 50 mg/m3
	Cyclohexane	110-82-7	PEL	300 ppm 1,050 mg/m3
	Ethylbenzene	100-41-4	PEL	100 ppm 435 mg/m3
	Heptane [and isomers]	142-82-5	PEL	500 ppm 2,000 mg/m3
	N-hexane	110-54-3	PEL	500 ppm 1,800 mg/m3
ACGIH	Toluene	108-88-3	TWA	50 ppm
	Xylene	1330-20-7	TWA	100 ppm
		1330-20-7	STEL	150 ppm
	Ethanol; Ethyl alcohol	64-17-5	TWA	1,000 ppm
	Trimethylbenzene	25551-13-7	TWA	25 ppm
	Isopentane; 2-Methylbutane	78-78-4	TWA	600 ppm
	Naphthalene	91-20-3	TWA	10 ppm
		91-20-3	STEL	15 ppm
	Benzene	71-43-2	TWA	0.5 ppm
		71-43-2	STEL	2.5 ppm
	Pentane	109-66-0	TWA	600 ppm
	Cyclohexane	110-82-7	TWA	100 ppm
	Ethylbenzene	100-41-4	TWA	100 ppm
		100-41-4	STEL	125 ppm
Heptane [and isomers]	142-82-5	TWA	400 ppm	
	142-82-5	STEL	500 ppm	

	N-hexane	110-54-3	TWA	50 ppm
Engineering measures	: Use adequate ventilation to keep gas and vapor concentrations of this product below occupational exposure and flammability limits, particularly in confined spaces. Use only intrinsically safe electrical equipment approved for use in classified areas.			
Eye protection	: Safety glasses or goggles are recommended where there is a possibility of splashing or spraying. Ensure that eyewash stations and safety showers are close to the workstation location.			
Hand protection	: Gloves constructed of nitrile or neoprene are recommended. Consult manufacturer specifications for further information.			
Skin and body protection	: If needed to prevent skin contact, chemical protective clothing such as of DuPont TyChem®, Saranex or equivalent recommended based on degree of exposure. Flame resistant clothing such as Nomex ® is recommended in areas where material is stored or handled.			
Respiratory protection	: A NIOSH/ MSHA-approved air-purifying respirator with organic vapor cartridges or canister may be permissible under certain circumstances where airborne concentrations are or may be expected to exceed exposure limits or for odor or irritation. Protection provided by air-purifying respirators is limited. Refer to OSHA 29 CFR 1910.134, ANSI Z88.2-1992, NIOSH Respirator Decision Logic, and the manufacturer for additional guidance on respiratory protection selection. Use a NIOSH/ MSHA-approved positive-pressure supplied-air respirator if there is a potential for uncontrolled release, exposure levels are not known, in oxygen-deficient atmospheres, or any other circumstance where an air-purifying respirator may not provide adequate protection.			
Work / Hygiene practices	: Emergency eye wash capability should be available in the near proximity to operations presenting a potential splash exposure. Use good personal hygiene practices. Avoid repeated and/or prolonged skin exposure. Wash hands before eating, drinking, smoking, or using toilet facilities. Do not use as a cleaning solvent on the skin. Do not use solvents or harsh abrasive skin cleaners for washing this product from exposed skin areas. Waterless hand cleaners are effective. Promptly remove contaminated clothing and launder before reuse. Use care when laundering to prevent the formation of flammable vapors which could ignite via washer or dryer. Consider the need to discard contaminated leather shoes and gloves.			

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Clear to straw colored liquid
Odor	: Characteristic hydrocarbon-like
Odor threshold	0.5 - 1.1 ppm
pH	: Not applicable
Melting point/freezing point	About -101°C (-150°F)
Initial boiling point & range	Boiling point varies: 30 – 200°C (85 – 392°F)
Flash point	< -21°C (-5.8°F)
Evaporation rate	: Higher initially and declining as lighter components evaporate
Flammability (solid, gas)	: Flammable vapor released by liquid

Upper explosive limit	7.6 %(V)
Lower explosive limit	1.3 %(V)
Vapor pressure	345 - 1,034 hPa at 37.8 °C (100.0 °F)
Vapor density (air = 1)	Approximately 3 to 4
Relative density (water = 1)	0.8 g/mL
Solubility (in water)	Negligible
Partition coefficient (n-octanol/water)	2 – 7 as log Pow
Auto-ignition temperature	Approximately 250°C (480°F)
Decomposition temperature	Will evaporate or boil and possibly ignite before decomposition occurs.
Kinematic viscosity	0.64 to 0.88 mm ² /s range reported for gasoline
Conductivity (conductivity can be reduced by environmental factors such as a decrease in temperature)	: Hydrocarbon liquids without static dissipater additive may have conductivity below 1 picoSiemens per meter (pS/m). The highest electro-static ignition risks are associated with "ultra-low conductivities" below 5 pS/m. See Section 7 for sources of information on defining safe loading and handling procedures for low conductivity products.

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Vapors may form explosive mixture with air. Hazardous polymerization does not occur.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	Can react with strong oxidizing agents, peroxides, alkaline products and strong acids. Contact with nitric and sulfuric acids will form nitrocresols that can decompose violently.
Conditions to avoid	: Avoid high temperatures, open flames, sparks, welding, smoking and other ignition sources. Avoid static charge accumulation and discharge (see Section 7).
Hazardous decomposition products	: Ignition and burning can release carbon monoxide, carbon dioxide and non-combusted hydrocarbons (smoke).

SECTION 11. TOXICOLOGICAL INFORMATION

Skin contact	: Irritating to skin. Can be partially absorbed through skin.
Eye contact	: Irritating to eyes.
Ingestion	: Aspiration hazard if liquid is inhaled into lungs, particularly from vomiting after ingestion. Aspiration may result in chemical pneumonia, severe lung damage, respiratory failure and even death. Ingestion may cause gastrointestinal disturbances, including irritation, nausea, vomiting and diarrhea, and central nervous (brain) effects similar to alcohol intoxication. In severe cases, tremors, convulsions, loss of consciousness, coma, respiratory arrest and death may occur.

Inhalation and further information

Acute toxicity of benzene results primarily from depression of the central nervous system (CNS). Inhalation of concentrations over 50 ppm can produce headache, lassitude, weariness, dizziness, drowsiness, over excitation. Exposure to very high levels can result in unconsciousness and death.

Repeated over-exposure may cause liver and kidney injuries. Components of the product may affect the nervous system.

IARC has determined that gasoline and gasoline exhaust are possibly carcinogenic in humans. Inhalation exposure to completely vaporized unleaded gasoline caused kidney cancers in male rats and liver tumors in female mice. The U.S. EPA has determined that the male kidney tumors are species-specific and are irrelevant for human health risk assessment. The significance of the tumors seen in female mice is not known. Exposure to light hydrocarbons in the same boiling range as this product has been associated in animal studies with effects to the central and peripheral nervous systems, liver, and kidneys. The significance of these animal models to predict similar human response to gasoline is uncertain. This product contains benzene. Human health studies indicate that prolonged and/or repeated overexposure to benzene may cause damage to the blood-forming system (particularly bone marrow), and serious blood disorders such as aplastic anemia and leukemia. Benzene is listed as a human carcinogen by the NTP, IARC, OSHA and ACGIH.

Component:

Gasoline, natural; Low boiling point naphtha	8006-61-9	<u>Acute oral toxicity:</u> LD50 rat Dose: 18.8 mg/kg
		<u>Acute inhalation toxicity:</u> LC50 rat Dose: 20.7 mg/l Exposure time: 4 h
		<u>Skin irritation:</u> Classification: Irritating to skin. Result: Mild skin irritation
		<u>Eye irritation:</u> Classification: Irritating to eyes. Result: Moderate eye irritation
Toluene	108-88-3	<u>Acute oral toxicity:</u> LD50 rat Dose: 636 mg/kg
		<u>Acute dermal toxicity:</u> LD50 rabbit Dose: 12,124 mg/kg
		<u>Acute inhalation toxicity:</u> LC50 rat Dose: 49 mg/l Exposure time: 4 h
		<u>Skin irritation:</u> Classification: Irritating to skin. Result: Mild skin irritation Prolonged skin contact may defat the skin and produce dermatitis.
		<u>Eye irritation:</u> Classification: Irritating to eyes. Result: Mild eye irritation
Xylene	1330-20-7	<u>Acute oral toxicity:</u> LD50 rat Dose: 2,840 mg/kg
		<u>Acute dermal toxicity:</u> LD50 rabbit Dose: ca. 4,500 mg/kg
		<u>Acute inhalation toxicity:</u> LC50 rat Dose: 6,350 mg/l Exposure time: 4 h
		<u>Skin irritation:</u> Classification: Irritating to skin. Result: Mild skin irritation

		Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product. <u>Eye irritation:</u> Classification: Irritating to eyes. Result: Mild eye irritation
Ethanol; Ethyl alcohol	64-17-5	<u>Acute oral toxicity:</u> LD50 rat Dose: 6,200 mg/kg <u>Acute dermal toxicity:</u> LD50 rabbit Dose: 19,999 mg/kg <u>Acute inhalation toxicity:</u> LC50 rat Dose: 8,001 mg/l Exposure time: 4 h <u>Skin irritation:</u> Classification: Irritating to skin. Result: Mild skin irritation Prolonged skin contact may cause skin irritation and/or dermatitis. <u>Eye irritation:</u> Classification: Irritating to eyes. Result: Mild eye irritation Mild eye irritation
Naphthalene	91-20-3	<u>Acute oral toxicity:</u> LD50 rat Dose: 2,001 mg/kg <u>Acute dermal toxicity:</u> LD50 rat Dose: 2,501 mg/kg <u>Acute inhalation toxicity:</u> LC50 rat Dose: 101 mg/l Exposure time: 4 h <u>Skin irritation:</u> Classification: Irritating to skin. Result: Mild skin irritation <u>Eye irritation:</u> Classification: Irritating to eyes. Result: Mild eye irritation <u>Carcinogenicity:</u> N11.00422130
Benzene	71-43-2	<u>Acute oral toxicity:</u> LD50 rat Dose: 930 mg/kg <u>Acute inhalation toxicity:</u> LC50 rat Dose: 44 mg/l Exposure time: 4 h <u>Skin irritation:</u> Classification: Irritating to skin. Result: Mild skin irritation Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product. <u>Eye irritation:</u> Classification: Irritating to eyes. Result: Risk of serious damage to eyes.
Pentane	109-66-0	<u>Acute oral toxicity:</u> LD50 rat Dose: 2,001 mg/kg <u>Acute inhalation toxicity:</u> LC50 rat Dose: 364 mg/l Exposure time: 4 h <u>Skin irritation:</u> Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product. <u>Eye irritation:</u> Classification: Irritating to eyes. Result: Mild eye irritation
Cyclohexane	110-82-7	<u>Acute dermal toxicity:</u> LD50 rabbit Dose: 2,001 mg/kg <u>Acute inhalation toxicity:</u> LC50 rat Dose: 14 mg/l Exposure time: 4 h

		<p><u>Skin irritation:</u> Classification: Irritating to skin. Result: Skin irritation</p> <p><u>Eye irritation:</u> Classification: Irritating to eyes. Result: Mild eye irritation</p>
Ethylbenzene	100-41-4	<p><u>Acute oral toxicity:</u> LD50 rat Dose: 3,500 mg/kg</p> <p><u>Acute dermal toxicity:</u> LD50 rabbit Dose: 15,500 mg/kg</p> <p><u>Acute inhalation toxicity:</u> LC50 rat Dose: 18 mg/l Exposure time: 4 h</p> <p><u>Skin irritation:</u> Classification: Irritating to skin. Result: Mild skin irritation</p> <p><u>Eye irritation:</u> Classification: Irritating to eyes. Result: Risk of serious damage to eyes.</p>
Heptane [and isomers]	142-82-5	<p><u>Acute oral toxicity:</u> LD50 rat Dose: 15,001 mg/kg</p> <p><u>Acute inhalation toxicity:</u> LC50 rat Dose: 103 g/m³ Exposure time: 4 h</p> <p><u>Skin irritation:</u> Classification: Irritating to skin. Result: Skin irritation Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product.</p> <p><u>Eye irritation:</u> Classification: Irritating to eyes. Result: Mild eye irritation</p>
N-hexane	110-54-3	<p><u>Acute oral toxicity:</u> LD50 rat Dose: 25,000 mg/kg</p> <p><u>Acute dermal toxicity:</u> LD50 rabbit Dose: 2,001 mg/kg</p> <p><u>Acute inhalation toxicity:</u> LC50 rat Dose: 171.6 mg/l Exposure time: 4 h</p> <p><u>Skin irritation:</u> Classification: Irritating to skin. Result: Skin irritation</p> <p><u>Eye irritation:</u> Classification: Irritating to eyes. Result: Mild eye irritation</p> <p><u>Teratogenicity:</u> N11.00418960</p>

Carcinogenicity

NTP	:	Naphthalene (CAS-No.: 91-20-3) Benzene (CAS-No.: 71-43-2)
IARC	:	Gasoline, natural; Low boiling point naphtha (CAS-No.: 8006-61-9) Naphthalene (CAS-No.: 91-20-3) Benzene (CAS-No.: 71-43-2) Ethylbenzene (CAS-No.: 100-41-4)
OSHA	:	Benzene (CAS-No.: 71-43-2)
CA Prop 65	:	WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. Toluene (CAS-No.: 108-88-3)

Benzene (CAS-No.: 71-43-2)

SECTION 12. ECOLOGICAL INFORMATION

Additional ecological information : Keep out of sewers, drainage areas, and waterways. Report spills and releases, as applicable, under Federal and State regulations.

Component:

Toluene	108-88-3	<p><u>Toxicity to fish:</u> LC50 Species: Carassius auratus (goldfish) Dose: 13 mg/l Exposure time: 96 h</p> <p><u>Acute and prolonged toxicity for aquatic invertebrates:</u> EC50 Species: Daphnia magna (Water flea) Dose: 11.5 mg/l Exposure time: 48 h</p> <p><u>Toxicity to algae:</u> IC50 Species: Selenastrum capricornutum (green algae) Dose: 12 mg/l Exposure time: 72 h</p>
Ethanol; Ethyl alcohol	64-17-5	<p><u>Toxicity to fish:</u> LC50 Species: Leuciscus idus (Golden orfe) Dose: 8,140 mg/l Exposure time: 48 h</p> <p><u>Acute and prolonged toxicity for aquatic invertebrates:</u> EC50 Species: Daphnia magna (Water flea) Dose: 9,268 - 14,221 mg/l Exposure time: 48 h</p>
Isopentane; 2-Methylbutane	78-78-4	<p><u>Toxicity to fish:</u> LC50 Species: Oncorhynchus mykiss (rainbow trout) Dose: 3.1 mg/l Exposure time: 96 h</p> <p><u>Acute and prolonged toxicity for aquatic invertebrates:</u> EC50 Species: Daphnia magna (Water flea) Dose: 2.3 mg/l Exposure time: 96 h</p>
Naphthalene	91-20-3	<p><u>Toxicity to algae:</u> EC50 Species: Dose: 33 mg/l Exposure time: 24 h</p>
Pentane	109-66-0	<p><u>Acute and prolonged toxicity for aquatic invertebrates:</u> EC50 Species: Daphnia magna (Water flea) Dose: 9.74 mg/l Exposure time: 48 h</p>
Cyclohexane	110-82-7	<p><u>Acute and prolonged toxicity for aquatic invertebrates:</u> EC50 Species: Daphnia magna (Water flea) Dose: 3.78 mg/l Exposure time: 48 h</p>

Heptane [and isomers]	142-82-5	<u>Toxicity to fish:</u> LC50 Species: Carassius auratus (goldfish) Dose: 4 mg/l Exposure time: 24 h <u>Acute and prolonged toxicity for aquatic invertebrates:</u> EC50 Species: Daphnia magna (Water flea) Dose: 1.5 mg/l Exposure time: 48 h
N-hexane	110-54-3	<u>Toxicity to fish:</u> LC50 Species: Pimephales promelas (fathead minnow) Dose: 2.5 mg/l Exposure time: 96 h <u>Acute and prolonged toxicity for aquatic invertebrates:</u> EC50 Species: Daphnia magna (Water flea) Dose: 2.1 mg/l Exposure time: 48 h

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal : Dispose of container and unused contents in accordance with federal, state and local requirements.

SECTION 14. TRANSPORT INFORMATION**CFR**

Proper shipping name : Petrol
 UN-No. : 1203
 Class : 3
 Packing group : II

TDG

Proper shipping name : Gasoline
 UN-No. : UN1203
 Class : 3
 Packing group : II

IATA Cargo Transport

UN UN-No. : UN1203
 Description of the goods : Gasoline
 Class : 3
 Packaging group : II
 ICAO-Labels : 3
 Packing instruction (cargo aircraft) : 364
 Packing instruction (cargo aircraft) : Y341

IATA Passenger Transport

UN UN-No. : UN1203
 Description of the goods : Gasoline
 Class : 3

Packaging group : II
 ICAO-Labels : 3
 Packing instruction (passenger aircraft) : 353
 Packing instruction (passenger aircraft) : Y341

IMDG-Code

UN-No. : UN 1203
 Description of the goods : Gasoline
 Class : 3
 Packaging group : II
 IMDG-Labels : 3
 EmS Number : F-E S-E
 Marine pollutant : No

SECTION 15. REGULATORY INFORMATION

OSHA Hazards : Flammable liquid
 Highly toxic by ingestion
 Moderate skin irritant
 Severe eye irritant
 Carcinogen

TSCA Status : On TSCA Inventory

DSL Status : . All components are on the Canadian DSL list.

SARA 311/312 Hazards : Fire Hazard
 Acute Health Hazard
 Chronic Health Hazard

CERCLA SECTION 103 and SARA SECTION 304 (RELEASE TO THE ENVIRONMENT)

The CERCLA definition of hazardous substances contains a "petroleum exclusion" clause which exempts crude oil. Fractions of crude oil, and products (both finished and intermediate) from the crude oil refining process and any indigenous components of such from the CERCLA Section 103 reporting requirements. However, other federal reporting requirements, including SARA Section 304, as well as the Clean Water Act may still apply.

California Prop. 65 : WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Toluene 108-88-3

Benzene 71-43-2

SECTION 16. OTHER INFORMATION**Further information**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Revision Date : 08/09/2012

6, 8, 10, 12, 14, 16, 64, 68, 91, 112, 306, 1092, 1106, 1500, 1570, 1571, 1651, 1652, 1654, 1700, 1701, 1702, 1710, 1711, 1714, 1726, 1729, 1730, 1732, 1733, 1826, 1848, 1880, 1950



KleenDEF Diesel Exhaust Fluid

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date: 04/21/2017

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
Product name : KleenDEF Diesel Exhaust Fluid

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Solution for NOx reduction in SCR systems

1.3. Details of the supplier of the safety data sheet

Old World Industries, LLC
4065 Commercial Ave.
Northbrook, IL 60062 - USA
T (847) 559-2000
www.oldworldind.com

1.4. Emergency telephone number

Emergency number : (800) 424-9300; (703) 527 3887 (International)
Chemtrec

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Not classified

2.2. Label elements

GHS-US labelling

Signal word (GHS-US) : None
Hazard statements (GHS-US) : None
Precautionary statements (GHS-US) : None

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	% by wt	GHS-US classification
water	(CAS-No.) 7732-18-5	67.5	Not classified
urea	(CAS-No.) 57-13-6	32.5	Not classified

Full text of hazard classes and H-statements : see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation : Assure fresh air breathing. Allow the victim to rest.
First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.
First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : The EPA has no established reportable quantity for spills for this material, secondary containment is not specified.

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials. For minor spillages wash down with excess of water. Mop up small spills.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Direct sunlight, Heat sources. Keep container closed when not in use.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Appropriate engineering controls

No additional information available

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8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure. Gloves. Protective goggles.

Hand protection:

Wear protective gloves

Eye protection:

Chemical goggles or safety glasses

Respiratory protection:

Wear appropriate mask



Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Color	: Colorless
Odor	: characteristic ammonia odor
Odor threshold	: No data available
pH	: 9 - 10
Relative evaporation rate (butylacetate=1)	: < 1
Freezing point	: -11 °C (12 °F)
Boiling point	: > 100 °C (212 °F)
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: Not Applicable
Relative vapor density at 20 °C	: 0.6 H ₂ O, >1
Specific Gravity	: 1.09
Solubility	: Soluble in water. Water: 100 %
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

KleenDEF Diesel Exhaust Fluid

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

Strong acids. Strong bases. oxidizing agents (peroxides, chromates, dichromates).

10.6. Hazardous decomposition products

Carbon monoxide. Carbon dioxide. Fume.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

urea (57-13-6)	
LD50 oral rat	8,471.00 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Literature study; 14300 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal rat	> 3,200.00 mg/kg (Rat; Literature study)
LD50 dermal rabbit	> 21,000.00 mg/kg (Rabbit; Literature study)
ATE US (oral)	8,471.00 mg/kg bodyweight

Skin corrosion/irritation : Not classified
pH: 9 - 10

Serious eye damage/irritation : Not classified
pH: 9 - 10

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

urea (57-13-6)	
LC50 fish 1	> 6,810.00 mg/l (LC50; 96 h; Leuciscus idus; Static system)
EC50 Daphnia 1	> 10,000.00 mg/l (EC50; 48 h; Daphnia magna)
Threshold limit algae 1	> 10000 mg/l (EC0; 168 h; Scenedesmus quadricauda; Static system; Fresh water)

12.2. Persistence and degradability

urea (57-13-6)	
Persistence and degradability	Inherently biodegradable. Hydrolysis in water. Highly mobile in soil.
ThOD	0.27 g O ₂ /g substance

12.3. Bioaccumulative potential

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urea (57-13-6)	
BCF fish 1	1.00 (BCF; 72 h; Brachydanio rerio)
BCF other aquatic organisms 1	11,700.00 (BCF)
Log Pow	< -1.73 (Experimental value; EU Method A.8: Partition Coefficient)
Bioaccumulative potential	Bioaccumulation: not applicable.

12.4. Mobility in soil

urea (57-13-6)	
Mobility in soil	Not applicable
Log Koc	Koc,0.037-0.064; Experimental value

12.5. Other adverse effects

Effect on ozone layer	: No additional information available
Effect on global warming	: No known effects from this product. No additional information available
Other information	: Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations	: As a non-hazardous liquid waste, it should be solidified with stabilizing agents such as sand, fly ash, or clay absorbent, so that no free liquid remains before disposal to an industrial waste landfill.
Ecology - waste materials	: Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not regulated

Transportation of Dangerous Goods

Refer to current TDG Canada for further Canadian regulations

ADR

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

SECTION 15: Regulatory information

15.1. US Federal regulations

KleenDEF Diesel Exhaust Fluid	
EPA TSCA Regulatory Flag	Toxic Substances Control Act (TSCA): The intentional ingredients of this product are listed
CERCLA RQ	None. This material is not classified as hazardous under U.S. EPA regulations.
SARA Section 302 Threshold Planning Quantity (TPQ)	No extremely hazardous substances are in this product.
SARA Section 311/312 Hazard Classes	Urea. No hazards resulting from the material as supplied.

urea (57-13-6)	
EPA TSCA Regulatory Flag	Toxic Substances Control Act (TSCA): The intentional ingredients of this product are listed
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard

water (7732-18-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

KleenDEF Diesel Exhaust Fluid

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

15.2. International regulations

CANADA

KleenDEF Diesel Exhaust Fluid	
WHMIS Classification	This SDS has been prepared according to the criteria of the Hazardous Products Regulations (HPR) (WHMIS 2015) and the SDS contains all of the information required by the HPR. Applicable GHS information is listed in section 2.2 of this SDS.

EU-Regulations

No additional information available

National regulations

KleenDEF Diesel Exhaust Fluid	
DSL (Canada): The intentional ingredients of this product are listed	
urea (57-13-6)	
DSL (Canada): The intentional ingredients of this product are listed	
EINECS (Europe): The intentional ingredients of this product are listed	

15.3. US State regulations

California Proposition 65 - This product does not contain any substance(s) known to the state of California to cause cancer, developmental toxicity and/or reproductive toxicity

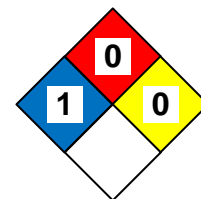
SECTION 16: Other information

Revision date : 04/21/2017

NFPA health hazard : 1 - Materials that, under emergency conditions, can cause significant irritation.

NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



Hazard Rating

Health : 1 Slight Hazard - Irritation or minor reversible injury possible

Flammability : 0 Minimal Hazard - Materials that will not burn

Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Personal protection : B - Safety glasses, Gloves

SDS GHS US (GHS HazCom 2012) OWI

Old World Industries, LLC makes no warranty, representation or guarantee as to the accuracy, sufficiency or completeness of the material set forth herein. It is the user's responsibility to determine the safety, toxicity and suitability of his own use, handling and disposal of this product. Since actual use by others is beyond our control, no warranty, expressed or implied, is made by Old World Industries, LLC as to the effects of such use, the results to be obtained or the safety and toxicity of this product, nor does Old World Industries, LLC assume liability arising out of the use by others of this product referred to herein. The data in this SDS relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

Custom tint) LBC (Lead Barrier Compound) No. 5800, No. 5801 White, 5800 Antique Linen (or 5899
: Lead Encapsulant

Manufactured For:
Fiberlock Technologies, Inc.
150 Dascomb Road
Andover, MA 01810
P: 800-342-3755 F: 978-475-6205

Emergency Telephone Numbers:
CHEM TEL: (U.S.): 1-800-255-3924
(Outside the U.S.): 813-248-0585
Poison Control Center (Medical): 800-222-1222

Signal Word:



Hazard Statements:
Harmful if inhaled.
Causes serious eye irritation.
May cause an allergic skin reaction.
Suspected of causing cancer.

This product is considered hazardous by The 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute Toxicity-Inhalation (Vapors) Category 4
Acute Toxicity-Inhalation (Dust-mists) Category 2
Serious eye damage/eye irritation – Category 2
Skin sensitization – Category 1
Carcinogenicity – Category 2

: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protection (eye protection, gloves) during application. When grinding/sanding dry films, wear respiratory protection.

If on skin, wash with plenty of soap and water. If in eyes, rinse cautiously for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If inhaled, remove victim to fresh air. If exposed or concerned, get medical advice.

Keep closures tight and containers upright to prevent leakage. **KEEP FROM FREEZING.** Product is non-combustible.

The coating and any contaminated diking material should be thoroughly air dried and collected into drums. The drums should be sealed and labeled and land-filled or incinerated according to local, regional and national regulations.

Not applicable

Toxic to aquatic life with long lasting effects. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.

<u>Chemical Name</u>	<u>CAS No.</u>	<u>Weight, %*</u>
Titanium dioxide	13463-67-7	10-30
Calcium carbonate	1317-65-3	10-30
Propylene glycol	57-55-6	3-7
Chlorothalonil	1897-45-6	0.1-1
Methylchloroisothiazolinone	26172-55-4	0.1-1
Zinc oxide	1314-13-2	1-4

Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

If symptoms persist, call a physician. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area.

Wash skin with soap and water. In the case of skin irritation or allergic reactions see a physician. May cause an allergic skin reaction.

Remove to fresh air. If symptoms persist, call a physician. If breathing has stopped, give artificial respiration. Get medical attention immediately. If not breathing, give artificial respiration. Do not breathe dust.

Do NOT induce vomiting. Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person. Get medical attention.

Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Wear personal protective clothing (see section 8). Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid breathing vapors or mists.

Burning sensation. Coughing and/or wheezing. Difficulty in breathing. Itching. Rashes. Hives.

Treat symptomatically. May cause sensitization of susceptible persons.



Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

CAUTION: Use of water spray when fighting fire may be inefficient.

Product is/or contains a sensitizer. May cause sensitization by skin contact.

Sensitizer: Liquid Toxic: Liquid

Carbon oxides

Sensitivity to mechanical impact No.
Sensitivity to static impact No.

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.



Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Ensure adequate ventilation. Avoid breathing vapors or mists. Avoid generation of dust.

Refer to protective measures listed in Sections 7 & 8

Refer to protective measures listed in Sections 7 & 8.

Prevent further leakage or spillage if safe to do so.

Immediately place absorbent material in a sealed water-filled metal container to avoid spontaneous combustion of absorbent material contaminated with this product. Pick up and transfer to properly labeled containers.

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Avoid breathing vapors or mists. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Take off contaminated clothing and wash before reuse. Keep away from contact with clothing and other combustible materials to avoid fire.

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children.

None known based on information supplied.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Titanium dioxide 13463-67-7	TWA: 10 mg/m ³	TWA: 15 mg/m ³ total dust (vacated) TWA: 10 mg/m ³ total dust	IDLH: 5000 mg/m ³
Calcium carbonate 1317-65-3		TWA: 15mg/m ³ TWA: 5 mg/m ³ (vacated) TWA: 15 mg/m ³ (vacated) TWA: 5 mg/m ³	TWA: 5 mg/m ³ respirable dust TWA: 10 mg/m ³ total dust
Zinc oxide 1314-13-2	TWA: 5 mg/m ³	TWA: 5 STEL 100 CSI; 25 mg/m ³	No data available

ACGIH TLV: American Conference of Governmental Industrial Hygienists – Threshold Limit Value OSHA PEL: Occupational Safety and Health Administration – Permissible Exposure Limits NIOSH IDLH Immediately Dangerous to Life or Health

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992). See section 15 for national exposure control parameters

Showers / Eyewash Stations / Ventilation Systems

If splashes are likely to occur, wear safety glasses with side shields (or goggles).
None required for consumer use.

Wear protective gloves and protective clothing

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Handle in accordance with good industrial hygiene and safety practice. Take off contaminated clothing and wash before reuse. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

Viscous liquid
White
No information available

Very Slight
No information available

pH	8.5	None known
Melting/freezing point	No data available	None known
Boiling point/boiling range	No data available	None known
Flash Point	No data available	None known
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		
Upper flammability limit	No data available	None known
Lower flammability limit	No data available	None known
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Specific Gravity	No data available	None known
Water Solubility	Miscible in water	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Explosive properties	No data available	
Oxidizing properties	No data available	

Softening Point	No data available
VOC Content (%)	No data available
Particle size/distribution	No data available

No data available

Excessive heat

Stable under recommended storage conditions

None known based on information supplied

None under normal processing

Carbon oxides

Hazardous polymerization does not occur

Product does not present an acute toxicity hazard based on known or supplied information

Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract. Harmful by inhalation (based on components).

Specific test data for the substance or mixture is not available. Expected to be an irritant based on components. May cause redness, itching, and pain. May cause temporary eye irritation.

Specific test data for the substance or mixture is not available. May cause irritation. Prolonged contact may cause redness and irritation.

Specific test data for the substance or mixture is not available. Ingestion may cause irritation to mucous membranes. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Titanium dioxide 13463-67-7	> 10000 mg/kg (Rat)		
Propylene Glycol 57-55-6	= 20000 mg/kg (Rat)	= 20800 mg/kg (Rabbit)	

Chlorothalonil 1897-45-6		> 10 g/kg (Rabbit)	= 310 mg/m ³ (Rat) 1 h
Methylchloroisothiazolinone 26172-55-4	= 481 mg/kg (Rat)	> 1008 mg/kg (Rat)	= 1.23 mg/L (Rat) 4 h
Zinc oxide – 1314-13-2	7950 mg/kg (Mouse)	No data available	No data available

May cause redness and tearing of the eyes, coughing and/or wheezing, itching, rashes and hives.

May cause sensitization of susceptible persons. May cause sensitization by skin contact.

No information available

The table below indicates whether each agency has listed any ingredient as a carcinogen

Chemical Name	ACGIH	IARC	NTP	OSHA
Titanium dioxide 13463-67-7		Group 2B		X
Chlorothalonil 1897-45-6		Group 2B		X

A2 – Suspected Human Carcinogen

Group 2B – Possibly Carcinogenic to Humans

X-Present

No information available

Titanium dioxide has been classified by the International Agency for Research on Cancer (IARC) as possibly carcinogenic to humans (Group 2B) by inhalation. Contains a known or suspected carcinogen.

Eyes, respiratory system, skin, gastrointestinal tract (GI) & lungs.

No information available

The following values are calculated based on chapter 3.1 of the GHS document

8,711.00 mg/kg 2.41 mg/l

21,608.00 mg/kg (ATE) 16.00 ATEmix

3,118.00 ppm (4hr)

Toxic to aquatic life with long lasting effects

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Propylene Glycol 57-55-6	96h EC50: = mg/L (Pseudokirchneriella Subcapitata)	96h LC50: = 51600 mg/L (Oncorhynchus mykiss) 96h LC50: 41-47 mL/L (Oncorhynchus mykiss) 96h LC50: 51400 mg/L (Pimephales promelas) 96h LC50: = 710 mg/L (Pimephales promelas)		24h EC50: > 10000 mg/L 48h EC50: > 1000 mg/L
Chlorothalonil 1897-45-6	72h EC50: = 0.57 mg/L (Desmodesmus Subspicatus) 72h EC50: = 0.0068 mg/L (Pseudokirchneriella Subcapitata)	96h LC50: = 0.012 mg/L (Oncorhynchus mykiss) 96h LC50: 0.0076 mg/L (Oncorhynchus mykiss) 96h LC50: 0.0221-0.032 mg/L (Lepomis macrochirus) 96h LC50: 0.045-0.057 mg/L (Lepomis macrochirus)		48h EC50: 0.0342-0.143 mg/L
Methylchloroisothiazolinone 26172-55-4	72h EC50: 0.11-0.16mg/L (Pseudokirchneriella Subcapitata) 96h EC50: 0.03-0.13 mg/L (Pseudokirchneriella subcapitata) 120h EC50: = 0.31 mg/L (Anabaena Flos-aquae)	96h LC50: = 1.6 mg/L (Oncorhynchus mykiss)	EC50 = 5.7 mg/L 16h	48 th EC50: = 4.71 mg/L 48h EC50: 0.12-0.3 mg/L 48h EC50: 0.71-0.99 mg/L

No information available

Chemical Name	Log Pow
Chlorothalonil 1897-45-6	2.9
Methylchloroisothiazolinone 26172-55-4	-0.71-0.75

No information available

This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

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<u>DOT</u>	Not Regulated
Proper Shipping Name	Non-Regulated
Hazard Class	N/A
<u>TDG</u>	
Un-No.	UN3082
Proper Shipping Name	Environmentally Hazardous Substance, Liquid, N.O.S.
Hazard Class	9
Packing Group	III
Description	UN3082, Environmentally Hazardous Substance, Liquid, N.O.S. (Chlorothalonil), 9, III, Marine Pollutant
<u>IATA</u>	
Un-No.	3082
Proper Shipping Name	Environmentally Hazardous Substance, Liquid, N.O.S.
Hazard Class	9
Packing Group	III
Description	UN3082, Environmentally Hazardous Substance, Liquid, N.O.S. (Chlorothalonil), 9, III
<u>IMDG/IMO</u>	
Un-No.	3082
Proper Shipping Name	Environmentally Hazardous Substance, Liquid, N.O.S.
Hazard Class	9
Packing Group	III
EmS No.	F-A, S-F
Marine Pollutant Description	Product is a marine pollutant according to the criteria set by IMDG/IMO UN3082, Environmentally Hazardous Substance, Liquid, N.O.S. (Chlorothalonil), 9, III, Marine Pollutant
<hr/>	

TSCA Complies
DSL All components are listed either on the DSL or NDSL

– United States Toxic Substances Control Act Section 8(b) Inventory
– Canadian Domestic Substances List/Non-Domestic Substances List

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical Name	CAS No.	Weight - %	SARA 313 – Threshold Values %
Chlorothalonil	1897-45-6	0.1-1	0.1

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

This product contains the following Proposition 65 chemicals:

Chemical Name	California Proposition 65
Titanium dioxide – 13463-67-7	Carcinogen
Chlorothalonil – 1897-45-6	Carcinogen

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Rhode Island	Illinois
Titanium dioxide – 13463-67-4	X	X	X		
Calcium carbonate – 1317-65-3	X	X	X		
Propylene Glycol – 57-55-6	X		X		
Chlorothalonil – 1897-45-6	X	X	X	X	
Zinc oxide – 1314-13-2	X	X	X		

Canada
 WHMIS Hazard Class
 D2A – Very toxic materials
 D2B – Toxic materials



NFPA	Health Hazards 2	Flammability 0	Instability 0	Physical and Chemical Hazards
HMIS	Health Hazards 2*	Flammability 0	Physical Hazard 0	Personal Protection X

Chronic Hazard Star Legend * = Chronic Health Hazard

If you scrape, sand or remove old paint, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear NIOSH-approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and wet mop. Before you start, find out how to protect yourself and your family by contacting the National Lead Information Hotline at 1-800-424-LEAD (5323) or log on to: www.epa.gov/lead

Lead Shield No. 5470 Clear & No. 5475 Blue
: Coatings for Post-Removal Lockdown

Manufactured For:
Fiberlock Technologies, Inc.
150 Dascomb Road
Andover, MA 01810
P: 800-342-3755 F: 978-475-6205

Emergency Telephone Numbers:
CHEM TEL: (U.S.): 1-800-255-3924
(Outside the U.S.): 813-248-0585

Signal Word:



Hazard Statements:
Harmful if inhaled.
Can cause mild skin irritation.
Can cause eye irritation.

This product is considered hazardous by The 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Toxicity-Inhalation (Vapors) Category 4
Toxicity-Inhalation (Dust-mists) Category 4
Eye irritation – Category 2
Skin irritation – Category 2

: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protection (eye protection, gloves) during application. When grinding/sanding dry films, wear respiratory protection.

If on skin, wash with plenty of soap and water. If in eyes, rinse cautiously for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If inhaled, remove victim to fresh air. If exposed or concerned, get medical advice.

Keep closures tight and containers upright to prevent leakage. KEEP FROM FREEZING. Product is non-combustible.

The coating and any contaminated diking material should be thoroughly air dried and collected into drums. The drums should be sealed and labeled and land-filled or incinerated according to local, regional and national regulations.

Not applicable

Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.



<u>Chemical Name</u>	<u>CAS No.</u>	<u>Weight, %*</u>
Chlorothalonil	1897-45-6	0.1-1
Bicyclic oxazolidine	056709-13-8	0.1-1
Ethylene glycol	107-21-1	1-5



Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

If symptoms persist, call a physician. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area.

Wash skin with soap and water. In the case of skin irritation or allergic reactions see a physician. May cause an allergic skin reaction.

Remove to fresh air. If symptoms persist, call a physician. If breathing has stopped, give artificial respiration. Get medical attention immediately. If not breathing, give artificial respiration. Do not breathe dust.

Do NOT induce vomiting. Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person. Get medical attention.

Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Wear personal protective clothing (see section 8). Ensure that medical personnel are aware of the material(s)

involved, take precautions to protect themselves and prevent spread of contamination. Avoid breathing vapors or mists.

No data available

Treat symptomatically. May cause sensitization of susceptible persons.



Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

CAUTION: Use of water spray when fighting fire may be inefficient.

No data available

Carbon oxides

Sensitivity to mechanical impact No.
Sensitivity to static impact No.

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.



Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Ensure adequate ventilation. Avoid breathing vapors or mists. Avoid generation of dust.

Refer to protective measures listed in Sections 7 & 8.



Refer to protective measures listed in Sections 7 & 8.



Prevent further leakage or spillage if safe to do so

Immediately place absorbent material in a sealed water-filled metal container to avoid spontaneous combustion of absorbent material contaminated with this product. Pick up and transfer to properly labeled containers.

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Avoid breathing vapors or mists. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Take off contaminated clothing and wash before reuse. Keep away from contact with clothing and other combustible materials to avoid fire.

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children.

None known based on information supplied

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Bicyclic oxazolidine 056709-13-8	*****	Not Established	*****
Ethylene glycol 107-21-1	TWA: 50 ppm	TWA: 50 ppm (STEL 100 mg/m ³)	No data available

ACGIH TLV: American Conference of Governmental Industrial Hygienists – Threshold Limit Value OSHA PEL: Occupational Safety and Health Administration – Permissible Exposure Limits NIOSH IDLH Immediately Dangerous to Life or Health

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992). See section 15 for national exposure control parameters

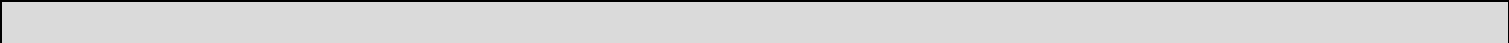
Showers / Eyewash Stations / Ventilation Systems

If splashes are likely to occur, wear safety glasses with side shields (or goggles). None required for consumer use.

Wear protective gloves and protective clothing

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Handle in accordance with good industrial hygiene and safety practice. Take off contaminated clothing and wash before reuse. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.



Liquid
Clear or blue
No information available

Very Slight
No information available

pH	8.5	None known
Melting/freezing point	No data available	None known
Boiling point/boiling range	No data available	None known
Flash Point	No data available	None known
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		
Upper flammability limit	No data available	None known
Lower flammability limit	No data available	None known
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Specific Water Solubility	Miscible in water	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Autoignition temperature	No data available	None known
Gravity	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Explosive properties	No data available	
Oxidizing properties	No data available	
Softening Point	No data available	
VOC Content (%)	No data available	
Particle size	No data available	
Particle size distribution	No data available	



No data available

Excessive heat

Stable under recommended storage conditions

None known based on information supplied

None under normal processing

Carbon oxides

Hazardous polymerization does not occur

Product does not present an acute toxicity hazard based on known or supplied information.

Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract. Harmful by inhalation (based on components).

Specific test data for the substance or mixture is not available. Expected to be an irritant based on components. May cause redness, itching, and pain. May cause temporary eye irritation.

Specific test data for the substance or mixture is not available. May cause irritation. Prolonged contact may cause redness and irritation.

Specific test data for the substance or mixture is not available. Ingestion may cause irritation to mucous membranes. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Bicyclic oxazolidine 056709-13-8	= 2974 mg/kg	=2000 mg/kg (Rabbit)	<1.8-4.0 mg/L (Rat) 4 hr
Chlorothalonil 1897-45-6	No data available	>10 g/kg (Rabbit)	=310 mg/m ³ (Rat) 1 hr
Ethylene glycol 107-21-1	= 4700 mg/kg (Rat)	No data available	<200 mg/m ³ (Rat) 4 hr

May cause redness and tearing of the eyes, coughing and/or wheezing, itching, rashes and hives.

May cause sensitization of susceptible persons. May cause sensitization by skin contact.

No information available

Yes

Chemical Name Chlorothalonil	ACGIH	IARC Group 2B	NTP	OSHA X
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No information available

No data available

Eyes, respiratory system, skin, gastrointestinal tract (GI) & lungs.

No information available

No data available

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Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Ethylene Glycol 107-21-1	(Chlorella pyrenoidosa) 180,000 mg/L toxic Toxicity Threshold (cell multiplication Inhibition test): Algae (Microcystis aeruginosa), 2000 mg/L; Green algae	LC50: = 41000 mg/L 96h [Fish (Trout)] 96h [Fish (bluegill fish)] 34250 mg/L 72h [Fish (Goldfish)]	No data available	46300 mg/L 48h (water flea)
Chlorothalonil 1897-45-6	72h EC50: = 0.57 mg/L (Desmodesmus Subspicatus) 72h EC50: = 0.0068 mg/L (Pseudokirchneriella Subcapitata)	96h LC50: = 0.012 mg/L (Oncorhynchus mykiss) 96h LC50: 0.0076 mg/L (Oncorhynchus mykiss) 96h LC50: 0.0221-0.032 mg/L (Lepomis macrochirus) 96h LC50: 0.045-0.057 mg/L (Lepomis macrochirus)	No data available	No data available

No information available

No data available

No information available

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This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

331

DOT Not Regulated
Proper Shipping Name Non-Regulated
Hazard Class N/A

TDG
No data available

IATA
No data available

IMDG/IMO
No data available

TSCA Complies
DSL All components are listed either on the DSL or NDSL

- United States Toxic Substances Control Act Section 8(b) Inventory
 - Canadian Domestic Substances List/Non-Domestic Substances List
-

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical Name	CAS No.	Weight - %	SARA 313 - Threshold Values %
Chlorothalonil	1897-45-6	0.1-1	0.1

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

Chemical Name
Ethylene glycol – 107-21-1
Chlorothalonil – 1897-45-6

California Proposition 65
Reproductive toxicant
Carcinogen

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Rhode Island	Illinois
Ethylene glycol – 107-21-1	X	X	X	X	X
Chlorothalonil – 1897-45-6	X	X	X	X	X
Bicyclic oxazolidine – 056709-13-8	X	X	X		

None listed



NFPA	Health Hazards 1	Flammability 0	Instability 0	Physical & Chemical Hazards -
HMIS	Health Hazards 1	Flammability 0	Physical Hazard 0	Personal Protection X

If you scrape, sand or remove old paint, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear NIOSH-approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and wet mop. Before you start, find out how to protect yourself and your family by contacting the National Lead Information Hotline at 1-800-424-LEAD (5323) or log on to: www.epa.gov/lead

SPI Supplies Division

Structure Probe, Inc.

206 Garfield Ave., West Chester, PA 19380-4512 USA

Phone: 1-(610)-436-5400 Fax: 1-(610)-436-5755

sales@2spi.com

<http://www.2spi.com>

Manufacturer's CAGE: 1P573

Safety Data Sheet

Date Effective: January 30, 2019

SPI Catalog # 04982-AB

SPI-Tac Liquid Adhesive Mountant

Section 1.1: Identification

Product or Trade Name SPI-Tac Liquid Adhesive Mountant

CAS #'s 67-64-1; 141-78-6; 108-05-4; proprietary resins

Chemical Formula..... mixture

Section 1.2: Relevant Uses/Restrictions

Liquid adhesive mountant.

This material is not being offered for clinical or diagnostic applications, agricultural uses or for human or animal consumption.

Section 1.3: Supplier of the Safety Data Sheet

SPI Supplies Division

Structure Probe, Inc.

206 Garfield Ave., West Chester, PA 19380-4512 USA

Phone: 1-(610)-436-5400 Fax: 1-(610)-436-5755

sales@2spi.com

<http://www.2spi.com>

Manufacturer's CAGE: 1P573

Section 1.4: Emergency telephone number

Emergencies

Contacting CHEMTREC:

24 Hour Emergency Use Only #'s...

Worldwide phone: 1-(703)-741-5970

Toll-free phone: 1-(800)-424-9300 USA + Canada only

Section 2: Hazard Identification

2.1 Classification of the substance

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquid (category 2)

Skin irritation (category 2)

Eye irritant (category 2A)
STOT-Single Exposure (category 3, Central Nervous System)

2.2 Label elements

Pictogram



Signal Word: Danger

Hazard statements:

- H225 Highly flammable liquid and vapor.
- H315 Causes skin irritation
- H319 Causes serious eye irritation.
- H336 May cause drowsiness or dizziness.

Precautionary statements:

- P210 Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources.
No smoking.
- P233 Keep container tightly closed.
- P273 Avoid release to the environment.
- P241 Use explosion-proof electrical/ ventilating/ light equipment.
- P242 Use only non-sparking tools.
- P243 Take precautionary measures against static discharge.
- P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.
- P264 Wash thoroughly after handling.
- P280 Wear protective gloves, protective clothing/ eye protection/ face protection.
- P361 Remove/ Take off immediately all contaminated clothing.
- P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P303 + P361 + P 353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water / shower.
- P312 Call a POISON CENTER/ doctor if you feel unwell.
- P332 + P313 If skin irritation occurs: Get medical advice/ attention.
- P337 + P313 If eye irritation persists get medical advice/ attention.
- P370 + P378 In case of fire: Use foam, dry chemical or carbon dioxide to extinguish.
- P403 + P325 Store in a well-ventilated place. Keep cool.
- P405 Store locked up.
- P501 Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.

2.3 Other Hazards:

Hazards not otherwise classified (HNOC): none/ none.

Hazardous Material Information System USA (estimated)

Health 1
Fire Hazard 3
Reactivity 0
Personal Protection

NFPA Rating (estimated)

Health 1
Flammability..... 3
Reactivity 0

Section 3: Composition

3.1 Substances: Product is a mixture

3.2 Mixture:

Component	CAS #	EU #	Percentage
Acetone	67-64-1	200-662-2	~91%
Ethyl acetate	141-78-6	205-500-4	2.72-5.45%
Vinyl acetate	108-05-4	203-545-4	0.09-0.45%
Proprietary resins	n/a	n/a	3.18-6.27%

Section 4: First Aid Measures

4.1 Description of first aid measures:

General Information:

If exposed or if you feel unwell: Call a POISON CENTER or doctor/physician. If unconscious place in recovery position and seek medical advice. Never give anything by mouth to an unconscious person or a person with cramps. Change contaminated, saturated clothing. Do not leave affected person unattended.

Inhalation:

Call a POISON CENTER/doctor. Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration.

Skin Contact:

After contact with skin, wash immediately with plenty of water and soap. Remove contaminated, saturated clothing immediately. In case of skin reactions, consult a physician.

Eye Contact:

In case of contact with eyes, flush immediately with plenty of flowing water for 10 to 15 minutes, holding eyelids apart, and consult an ophthalmologist. Protect uninjured eye. Remove contact lenses, if present and easy to do. Continue rinsing.

Ingestion:

If accidentally swallowed, rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Do NOT induce vomiting. Give nothing to eat or drink.

4.2 Most important symptoms and effects, both acute and delayed:

See Section 11.

4.3 Indication of any immediate medical attention and special treatment needed:

No data available.

4.5 Information to physician:

Treat symptomatically and supportively.

Section 5: Fire Fighting Measures

5.1 Extinguishing media:

Foam, dry chemical, or carbon dioxide.

5.2 Special hazards arising from the substance or mixture:

Carbon monoxide (CO) and/or Carbon dioxide (CO₂) may be liberated in case of fire.

5.3 Hazardous combustion products: Carbon monoxide (CO) and Carbon dioxide (CO₂).

5.4 Advice for firefighters:

Firefighter should wear self-contained breathing apparatus. Water may be ineffective, but may be used to cool exposed containers to prevent pressure build-up and possible auto-ignition or explosion when exposed to extreme heat. If water is used, fog nozzles are preferable.

Additional Information:

Do not allow run-off from fire-fighting to enter drains or water courses.

Do not inhale explosion and combustion gases.

Use caution when applying carbon dioxide in confined spaces. Carbon dioxide can displace oxygen.

Use water spray/stream to protect personnel and to cool endangered containers.

In case of fire: Evacuate area.

Section 6: Accidental Release Measures

6.1 Personal precautions:

In case of major fire and large quantities: Remove persons to safety.

6.2 Environmental precautions:

Prevent further leakage or spillage if safe to do so.

Discharge into the environment must be avoided.

Do not allow product to enter sewer or waterways.

6.3 Methods and material for containment and cleaning up:

Keep unnecessary personnel away.

Ensure adequate ventilation.

Avoid all sources of ignition.

Wear appropriate protective equipment and clothing during clean-up.

Absorb spill with an absorbent, non-combustible material such as earth, sand, or vermiculite.

Collect in closed and suitable containers for disposal.

Spilled product must never be returned to the original container for recycling.

6.4 Reference to other sections:

For personal protection information see Section 8.

For disposal information, see Section 13.

Section 7: Handling and Storage

7.1 Precautions for safe handling:

Avoid inhalation.

Avoid contact with skin and eyes.

Ensure adequate ventilation.

Keep away from open flame, heat, or sources of ignition.
No smoking.
Take precautionary measures against static discharges.

7.2 Conditions for safe storage, including any incompatibilities:

Keep in a cool, well ventilated area away from heat, sparks and open flame.
Keep container tightly closed and in a well-ventilated place.
Keep/store away from combustible materials.

7.3 Specific end uses:

Liquid adhesive mountant.

This material is not being offered for clinical or diagnostic applications, agricultural uses or for human or animal consumption.

Section 8: Exposure Controls and Personal Protection

8.1 Control parameter and Personal Protection:

Workplace exposure limits:

Acetone CAS # 67-64-1
NIOSH LTV: 290 mg/m³ / 250 ppm
OSHA LTV: 2400 mg/m³ / 1000 ppm
ACGIH TWA 500 ppm; STEL 750 ppm

Ethyl acetate CAS # 141-78-6
ACGIH TWA: 400 ppm
OSHA PEL: 400 ppm (1,400 mg/m³)

Vinyl acetate CAS # 108-05-4
ACGIH TWA: 10 ppm TWA
ACGIH STEL: 15 ppm

Biological limit values: No data available.

8.2 Exposure controls:

8.2.1 Appropriate engineering controls:

An eyewash facility and a safety shower should be available.
Use adequate ventilation to keep airborne concentrations below the permissible exposure limits (i.e. concentrations below one half of the PEL and other relevant standards).

8.2.2 Individual protection measures:

Wear suitable protective clothing.
When handling with chemical substances, protective clothing must be worn.
Eye/Face Protection: Safety goggles or safety glasses with side shields.
Skin Protection: Wear suitable gloves. When handling with chemical substances, protective gloves must be worn. In the case of wanting to use the gloves again, clean them before taking off and air them well. Check leak tightness/impermeability prior to use.
For short-term hand contact: Nitrile rubber/ 0.425 mm thick, 10 minutes max wearing time.
For long-term hand contact: Butyl rubber/ 0.50 mm, >480 minutes max wearing time.
Respiratory Protection: Necessary at aerosol or mist formation. If exposure limits are exceeded or irritation is experienced, NIOSH approved respiratory protection should be worn. Observe OSHA regulations for respirator use (29 CFR 1910.134).

Additional information:

Wash hands before breaks and after work.
Avoid contact with skin and eyes.
When using, do not eat, drink, or smoke.
Provide eye shower and label its location conspicuously.

8.2.3 Environmental exposure controls:

Do not allow product to enter sewer or water ways.

Section 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties: (based on CAS # 67-64-1)

Appearance: Colorless liquid

Odor: Characteristic, pungent

Odor threshold: No data available

pH: 5-6 (400 g/l; H₂O; 20 °C)

Melting point/Freezing point: -95.4 °C

Boiling point/Boiling point range: 56.2 °C (1013 hPa)

Flash Point: <-20 °C (-4 °F) (closed cup)

Evaporation rate: No data available

Flammability (solid, gas): Highly flammable liquid and vapor.

Upper/lower flammability or explosive limits:

Lower explosion limit: 2.6 % (v/v)

Upper explosion limit: 12.8 % (v/v)

Vapor Pressure: 233 hPa (20 °C)

Vapor density: 2.01 (20 °C)

Relative density: 0.792 g/cm³ (20 °C)

Solubility in water: Soluble (20 °C)

Partition coefficient (n-octanol/water): -0.24 (20 °C)

Auto-ignition temperature: 465 °C (869 °F) (DIN 51794)

Decomposition temperature: No data available.

Viscosity:

Kinematic viscosity: No data available

Dynamic viscosity: 0.32 mPa·s (20 °C)

Explosive properties: Not applicable

Oxidizing Properties: Not applicable

9.2 Other information:

No additional relevant information.

Section 10: Stability and Reactivity

10.1 Reactivity:

Vapors are heavier than air, spread along floors, and form explosive mixtures with air.

10.2 Chemical Stability:

The product is chemically stable under standard ambient conditions (room temperature).

10.3 Possibility of Hazardous Reactions:

Formation of explosive mixtures with:

Oxidizing agent, strong
 Reducing agent, strong
 Nitric acid
 Trichloromethane
 Peroxide

Violent reaction with:

Alkali (lye)
 Oxidizing agent
 Reducing agent

Exothermic reactions with:

Bromine
 Chlorine

10.4 Conditions to avoid:

UV-radiation / sunlight
 High temperatures

This material is combustible and can be ignited by heat, sparks, flames, or other sources of ignition, such as static electricity, pilot lights, or mechanical/electrical equipment.

10.5 Incompatible materials:

Rubber articles
 Plastic articles
 Nitrates
 Oxidizers
 Strong acids
 Alkalis

10.6 Hazardous decomposition products:

Carbon dioxide, Carbon monoxide, irritating and toxic fumes and gases.

10.7 Additional information:

No data available.

Section 11: Toxicological Information
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Information on the likely routes of exposure:**11.1 Information on toxicological effects:****A. Acute toxicity:**

RTECS #: CAS# 67-64-1: AL3150000
 CAS# 141-78-6: AH5425000
 CAS # 108-05-4: AK0875000

Toxicity data:	CAS# 67-64-11		
Type of Test	Species/Route	Dose/Duration	Results
Draize	Human/Eye	500 ppm	
Open Irritation	Rabbit/Skin	395 mg	Mild
Draize	Rabbit/Skin	500 mg/24H	Mild
Draize	Rabbit/Eye	20 mg	Severe
Draize	Rabbit/Eye	20 mg/24H	Moderate
TD _{Lo}	Human/Oral	2857 mg/kg	Coma; Kidney, Ureter, Bladder, other
TD _{Lo}	Human/Oral	2857 mg/kg	Coma; Metabolism (intermediary)-other

TC _{Lo}	Human/Inhalation	440 µg/m ³ /6M	Brain & Covering
TC _{Lo}	Human/Inhalation	10 mg/m ³ /6H	Metabolism (intermediary)-other
TC _{Lo}	Human/Inhalation	500 ppm	Sense Organs and Special Senses
TC _{Lo}	Human/Inhalation	12000 ppm/4H	Nausea or Vomiting/Muscle Weakness
LD _{Lo}	Human/Unreported	1159 mg/kg	Lethal Dose Value
LD50	Rat/Oral	5800 mg/kg	Altered Sleep; Tremor
LC50	Rat/Inhalation	50100 mg/m ³ /8H	Lethal Dose Value
LD _{Lo}	Rat/Intraperitoneal	500 mg/kg	General Anesthetic; Muscle Weakness
LD50	Rat/Intravenous	5500 mg/kg	Lethal Dose Value
LD50	Mouse/Oral	3 gm/kg	Lethal Dose Value
LC50	Mouse/Inhalation	44 gm/m ³ /4H	Lethal Dose Value

*** See RTECS for full listing ***

Toxicity data: CAS# 141-78-6

Type of Test	Species/Route	Dose/Duration	Results
Draize	Human/Eye	400 ppm	
TC _{Lo}	Human/Inhalation	400 ppm	Sense Organs & Special Senses Conjunctive Irritation; Lungs, Thorax – other
LD50	Rat/Oral	5260 mg/kg	Lethal Dose Value
LC50	Rat/Inhalation	200 gm/m ³	Somnolence; Acute Pulmonary Edema
LD _{Lo}	Rat/Subcutaneous	5 gm/kg	Lethal Dose Value
LD50	Mouse/Oral	4100 mg/kg	Somnolence; Changes in Motor Activity; coma
LC50	Mouse/Inhalation	45 gm/m ³ /2H	Lethal Dose Value
LD50	Mouse/Intraperitoneal	709 mg/kg	Lethal Dose Value
LD50	Rabbit/Oral	4935 mg/kg	Lethal Dose Value
LD50	Rabbit/Skin	>20 mL/kg	Lethal Dose Value
LD50	Guinea Pig/Oral	5500 mg/kg	Somnolence; Changes in Motor Activity; coma
LD50	Guinea Pig/Subcut.	3 gm/kg	Somnolence
TD _{Lo}	Rat/Intraperitoneal	8 mL/kg/8D-I	Liver; Enzyme Inhibition; Metabolism

*** See RTECS for full listing ***

Toxicity data: CAS# 108-05-4

Type of Test	Species/Route	Dose/Duration	Results
LD50	Rat/Oral	2920 mg/kg	
LD50	Rabbit/Dermal	2335 mg/kg	
LC50	Rabbit/Inhalation	2500 ppm/4 H	
LC50	Rabbit/Inhalation	2511 ppm/4H	
LC50	Rabbit/Inhalation	8800 ppm/4H	
LC50	Rat/Inhalation	3680 ppm/4 H	

Immediate and Delayed Health Effects: Central nervous system, Irritant, Mutagen, Some evidence of carcinogenicity.

B. Skin or Respiratory corrosion/irritation:

Causes mild skin irritation.

C. Serious eye damage/irritation:

Causes serious eye irritation.

D. Respiratory or skin sensitization:

In case of skin contact: Not sensitizing.

After inhalation: Not sensitizing.

E. Germ cell mutagenicity:

CAS # 67-64-1:

Sex chromosome loss and non-disjunction(Yeast-Saccharomyces cerevisiae) – 47600 ppm

Cytogenetic analysis (Rodent – hamster Fibroblast) – 40 gm/L

No indications of human germ cell mutagenicity exist.

F. Carcinogenicity:

CAS # 67-64-1: Not listed by ACGIH or IARC.
CAS # 141-78-6: Not listed by ACGIH, IARC, NIOSH, NTP or OSHA.
CAS # 108-05-4: Not listed by NTP or OSHA;
Listed as Group 2B by IARC;
Listed as A3 – Animal carcinogen with unknown relevance to humans.

G. Reproductive toxicity:

CAS # 67-64-1: Reproductive – Paternal Effects – spermatogenesis, including genetic material, sperm morphology, motility and count.

H. STOT-single exposure:

May cause drowsiness or dizziness.

I. STOT-repeated exposure: No data available

J. Aspiration hazard: No data available.

Section 12: Ecological Information

12.1 Toxicity:

CAS#141-78-6

CAS# 67-64-1

Ecotoxicity:

Fish (LC50):

Fathead Minnow:

230 mg/L

7280-8120 mg/L

Bluegill:

8300 mg/L

Environmental:

Terrestrial:

mobile in soil
Volatile from
Soil surface
Degraded
photochem.
In air/L/2=10d

volatilizes,
leaches, and
biodegrades
when released
to soil.

12.2 Persistence and degradability: No data available.

12.3 Bio-accumulative potential: No data available

12.4 Mobility in soil: No data available.

12.5 Results of PBT and vPvB assessment: No data available.

12.6 Other adverse effects: No data available.

Section 13: Disposal Considerations

13.1 Waste treatment methods:

Appropriate disposal / Product:

Hazardous Waste Number: D001: Ignitable.

Dispose according to all local, state and federal legislation. Consult the appropriate local waste disposal expert about waste disposal.

Appropriate disposal / Package:

Dispose according to all local, state, and federal legislation. Handle contaminated packages in the same way as the substance itself.

Additional information: No data available.

Section 14: Transport Information**DOT:**

14.1 UN number: UN1090
14.2 UN proper shipping name: Acetone
14.3 Transport hazard class(es): 3
14.4 Hazard label: 3
14.5 Packing Group: II
14.6 Environmental hazards: No
14.7 Marine pollutant: No
14.7 Special precautions for user: No data available.

IATA:

UN number: UN1090
UN proper shipping name: ACETONE
Transport hazard class(es): 3
Classification code:
Hazard label: 3
Packing Group: II
Special precautions for user: No data available.

IMDG:

UN number: UN1090
UN proper shipping name: ACETONE
Transport hazard class(es): 3
Classification code:
Hazard label: 3
Packing Group: II
Environmental hazards: No
MARINE POLLUTANT: No data available.
Special precautions for user: No data available.
Segregation group:
EmS-No.: F-E S-D
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: not relevant

Section 15: Regulatory Information**15.1 Safety, health and environmental regulations/ legislation specific for the substance or mixture:****US FEDERAL:****TSCA**

CAS # 67-64-1 is listed on the TSCA Active Inventory List.
CAS # 141-78-6 is listed on the TSCA Active Inventory List.
CAS # 108-05-4 is listed on the TSCA Active Inventory List.

Chemical Test Rules

Not listed

TSCA Significant New Use Rule

Not listed on SNUR under TSCA.

SARA**Section 302 (RQ/TPQ)**

CAS# 67-64-1: final RQ = 5000 pounds (2270 kg)

CAS# 141-78-6: final RQ = 5000 pounds (2270 kg)

CAS# 108-05-4: TPQ = 1000 pounds (454 kg)

SARA Codes

CAS# 67-64-1: fire hazard, acute health hazard, chronic health hazard

CAS# 141-78-6: fire hazard, acute health hazard, chronic health hazard

CAS # 108-05-4: fire hazard, acute health hazard, chronic health hazard

Clean Air Act:

CAS# 108-05-4: CAA TQ=15,000 pounds

Clean Water Act:

Not listed

OSHA:

Not listed as highly hazardous by OSHA.

STATE:

CAS# 67-64-1 may be found on the California Right to Know List.

CAS # 141-78-6 may be found on the California and Massachusetts Right to Know Lists.

CAS # 108-05-4 may be found on the California, New Jersey, and Massachusetts Right to Know Lists.

15.2 Chemical Safety Assessment:

Date of Preparation: 30 January 2019.

Abbreviations and acronyms

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

CMRG: Chemical Manufacturer's Recommended Guidelines

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

AIHA: American Industrial Hygiene Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

LD_{L0}: The lowest amount of a solid or liquid material reported to have caused the death of animals or humans.

PBT: Persistent, Bio-accumulative and Toxicological

vPvB: very Persistent and very Bio-accumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety Health

ATE: Acute Toxicity Estimates

TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
STEL: Short Term Exposure Limit
CEIL: Ceiling
TSCA: Toxic Substances Control Act (USA)
DSL: Domestic Substances List (Canada)
PICCS: Philippine Inventory of Chemicals and Chemical Substances
ENCS: Existing and New Chemical Substances (Japan)
AICS: Australian Inventory of Chemical Substances
IECSC: Inventory of Existing Chemical Substances in China
KECL: Korea Existing Chemicals List

Section 16: Other Information

Disclaimer of Liability:

Caution! Do not use SPI Supplies products or materials in applications involving implantation within the body; direct or indirect contact with the blood pathway; contact with bone, tissue, tissue fluid, or blood; or prolonged contact with mucous membranes. Products offered by SPI Supplies are not designed or manufactured for use in implantation in the human body or in contact with internal body fluids or tissues. SPI Supplies will not provide to customers making devices for such applications any notice, certification, or information necessary for such medical device use required by US FDA (Food and Drug Administration) regulation or any other statute. SPI Supplies and Structure Probe, Inc. make no representation, promise, express warranty or implied warranty concerning the suitability of these materials for use in implantation in the human body or in contact with internal body tissues of fluids.

The information and recommendations set forth above are taken from sources believed to be accurate as of the date hereof, however SPI Supplies and Structure Probe, Inc. make no warranty with respect to the accuracy of the information or the suitability of the recommendations, and assume no liability to any user thereof. The information contained in this sheet does not constitute a hazard assessment and should not be used in place of the user's own assessment of work place risks as required by other health and safety legislation. Be aware of the Structure Probe, Inc. Copyright Policy. Structure Probe, Inc. grants a nonexclusive license to make unlimited copies of this safety sheet for internal use only. Quite obviously, this information would pertain only to this material when purchased from SPI Supplies as product from other sources, with other ingredients and impurity levels could have substantially different properties.

SAFETY DATA SHEET

Mystik® JT-8® Synthetic Engine Oil, SAE 5W-40



Section 1. Identification

GHS product identifier : Mystik® JT-8® Synthetic Engine Oil, SAE 5W-40
Synonyms : Not available.
Code : 663019002

Supplier's details : CITGO Petroleum Corporation
P.O. Box 4689
Houston, TX 77210
sdsvend@citgo.com

Emergency telephone number (with hours of operation) : Technical Contact: (800) 248-4684
Medical Emergency: (832) 486-4700
CHEMTREC Emergency: (800) 424-9300
(United States Only)

Section 2. Hazards identification

OSHA/HCS status : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

Classification of the substance or mixture : Not classified.

GHS label elements

Signal word : No signal word.

Hazard statements : No known significant effects or critical hazards.

Precautionary statements

General : Avoid contact with eyes, skin and clothing.. May be harmful if swallowed. IF IN EYES: Rinse cautiously with water for several minutes. If swallowed, do not induce vomiting. After handling, always wash hands thoroughly with soap and water. If you feel unwell, seek medical attention and show the label when possible. Keep out of reach of children.

Prevention : Not applicable.

Response : Not applicable.

Storage : Store in a dry place and/or in closed container. Store in accordance with all local, regional, national and international regulations.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazards not otherwise classified : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Other means of identification : Not available.

CAS number/other identifiers

CAS number : Not applicable.

Section 3. Composition/information on ingredients

Ingredient name	%	CAS number
Distillates (petroleum), hydrotreated heavy paraffinic	≥50 - ≤75	64742-54-7
Distillates (petroleum), solvent-dewaxed heavy paraffinic	≤10	64742-65-0
Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated	≤10	68037-01-4
1-Decene, tetramer, mixed with 1-decene trimer, hydrogenated	≤10	68649-12-7

Any concentration shown as a range is to protect confidentiality or is due to process variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- Ingestion** : Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : No specific data.
- Skin contact** : No specific data.
- Ingestion** : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : Treat symptomatically and supportively.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

Specific hazards arising from the chemical : In a fire or if heated, a pressure increase will occur and the container may burst.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
sulfur oxides
phosphorus oxides
metal oxide/oxides

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8).

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Section 7. Handling and storage

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Bulk Storage Conditions: Maintain all storage tanks in accordance with applicable regulations. Use necessary controls to monitor tank inventories. Inspect all storage tanks on a periodic basis. Test tanks and associated piping for tightness. Maintain the automatic leak detection devices to assure proper working condition.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Distillates (petroleum), hydrotreated heavy paraffinic

ACGIH TLV (United States, 3/2016).

TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction

OSHA PEL (United States, 6/2016).

TWA: 5 mg/m³ 8 hours.

NIOSH REL (United States, 10/2013).

TWA: 5 mg/m³ 10 hours. Form: Mist
STEL: 10 mg/m³ 15 minutes. Form: Mist

Distillates (petroleum), solvent-dewaxed heavy paraffinic

ACGIH TLV (United States, 3/2016).

TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction

OSHA PEL (United States, 6/2016).

TWA: 5 mg/m³ 8 hours.

NIOSH REL (United States, 10/2013).

TWA: 5 mg/m³ 10 hours. Form: Mist
STEL: 10 mg/m³ 15 minutes. Form: Mist

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, vapor controls, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety glasses equipped with side shields are recommended as minimum protection in industrial settings. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles. Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If inhalation hazards exist, a full-face respirator may be required instead.

Skin protection

Hand protection : Chemical-resistant gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Section 8. Exposure controls/personal protection

- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Avoid skin contact with liquid. Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Leather boots are not protective for liquid contact.
- Respiratory protection** : Avoid inhalation of gases, vapors, mists or dusts. Use a properly fitted, air-purifying or supplied-air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

- Physical state** : Liquid.
- Color** : Amber.
- Odor** : Mild petroleum odor
- pH** : Not available.
- Boiling point** : Not available.
- Flash point** : Open cup: 222°C (431.6°F) [Cleveland.]
- Lower and upper explosive (flammable) limits** : Not available.
- Vapor pressure** : <0.013 kPa (<0.1 mm Hg) [room temperature]
- Vapor density** : Not available.
- Relative density** : 0.8564
- Density lbs/gal** : 7.13 lbs/gal
- Density gm/cm³** : Not available.
- Gravity, °API** : Estimated 34 @ 60 F
- Solubility** : Insoluble in the following materials: cold water.
- Flow time (ISO 2431)** : Not available.
- Viscosity** : Kinematic (40°C (104°F)): 0.93 cm²/s (93 cSt)
- Viscosity SUS** : Estimated 431 SUS @104 F

Section 10. Stability and reactivity

- Reactivity** : Not expected to be Explosive, Self-Reactive, Self-Heating, or an Organic Peroxide under US GHS Definition(s).
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid** : No specific data.
- Incompatible materials** : No specific data.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Distillates (petroleum), hydrotreated heavy paraffinic	LD50 Oral	Rat	>5000 mg/kg	-
	LD50 Dermal	Rabbit	>5000 mg/kg	-
Distillates (petroleum), solvent-dewaxed heavy paraffinic	LD50 Oral	Rat	>5000 mg/kg	-
	LD50 Dermal	Rabbit	>2000 mg/kg	-
Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated	LD50 Oral	Rat	>2000 mg/kg	-

Conclusion/Summary : **Distillates (petroleum), hydrotreated heavy paraffinic**: Mineral oil mists derived from highly refined oils are reported to have low acute and sub-acute toxicities in animals. Effects from single and short-term repeated exposures to high concentrations of mineral oil mists well above applicable workplace exposure levels include lung inflammatory reaction, lipoid granuloma formation and lipoid pneumonia. In acute and sub-acute studies involving exposures to lower concentrations of mineral oil mists at or near current work place exposure levels produced no significant toxicological effects.

Distillates (petroleum), solvent-dewaxed heavy paraffinic: Mineral oil mists derived from highly refined oils are reported to have low acute and sub-acute toxicities in animals. Effects from single and short-term repeated exposures to high concentrations of mineral oil mists well above applicable workplace exposure levels include lung inflammatory reaction, lipoid granuloma formation and lipoid pneumonia. In acute and sub-acute studies involving exposures to lower concentrations of mineral oil mists at or near current work place exposure levels produced no significant toxicological effects.

Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated: Practically non-irritating to eyes. Practically non-irritating to the skin.

Irritation/Corrosion

Not available.

Skin : No additional information.

Eyes : No additional information.

Respiratory : No additional information.

Sensitization

Not available.

Skin : No additional information.

Respiratory : No additional information.

Mutagenicity

Not available.

Conclusion/Summary : No additional information.

Carcinogenicity

Not available.

Conclusion/Summary : No additional information.

Reproductive toxicity

Not available.

Conclusion/Summary : No additional information.

Teratogenicity

Not available.

Conclusion/Summary : No additional information.

Section 11. Toxicological information

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.
Inhalation : No known significant effects or critical hazards.
Skin contact : No known significant effects or critical hazards.
Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.
Inhalation : No specific data.
Skin contact : No specific data.
Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.
Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.
Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : No known significant effects or critical hazards.
Carcinogenicity : No known significant effects or critical hazards.
Mutagenicity : No known significant effects or critical hazards.
Teratogenicity : No known significant effects or critical hazards.
Developmental effects : No known significant effects or critical hazards.
Fertility effects : No known significant effects or critical hazards.

Section 12. Ecological information

Toxicity

Not available.

Conclusion/Summary : Not available.

Persistence and degradability

Conclusion/Summary : **Butene, homopolymer (products derived from either/or But-1-ene/But-2-ene)**: This product is unlikely to biodegrade at a significant rate.

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated	>6.5	-	high
1-Decene, tetramer, mixed with 1-decene trimer, hydrogenated	5	-	high

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.

Section 14. Transport information

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL and the IBC Code : Not available.

Section 15. Regulatory information

U.S. Federal regulations : **United States inventory (TSCA 8b):** All components are listed or exempted.
Clean Water Act (CWA) 307: Phosphorodithioic acid, mixed O,O-bis(sec-Bu and isooctyl) esters, zinc salts
Clean Water Act (CWA) 311: fumaric acid; ethylenediamine; vinyl acetate; isoprene
 This material is classified as an oil under Section 311 of the Clean Water Act (CWA) and the Oil Pollution Act of 1990 (OPA). Discharges or spills which produce a visible sheen on waters of the United States, their adjoining shorelines, or into conduits leading to surface waters must be reported to the EPA's National Response Center at (800) 424-8802.

SARA 302/304

Composition/information on ingredients

Name	%	EHS	SARA 302 TPQ		SARA 304 RQ	
			(lbs)	(gallons)	(lbs)	(gallons)
ethylenediamine	<0.01	Yes.	10000	1337.1	5000	668.5
vinyl acetate	<0.0001	Yes.	1000	129	5000	644.8

SARA 304 RQ : 62261693.4 lbs / 28266808.8 kg [8719407.8 gal / 33006549.3 L]

SARA 311/312

Classification : Not applicable.

Composition/information on ingredients

No products were found.

State regulations

Massachusetts : None of the components are listed.
New York : The following components are listed: Butene, homopolymer (products derived from either/or But-1-ene/But-2-ene)
New Jersey : None of the components are listed.
Pennsylvania : The following components are listed: Butene, homopolymer (products derived from either/or But-1-ene/But-2-ene)

California Prop. 65 Clear and Reasonable Warnings (2018)

⚠ WARNING: This product can expose you to chemicals including Isoprene, which is known to the State of California to cause cancer, and Ethylene Glycol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Ingredient name	%	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
ethanediol	<0.01	No.	Yes.	-	-
isoprene	<0.1	Yes.	No.	-	-

International regulations

WHMIS (Canada) : Not controlled under WHMIS (Canada).

Inventory list

United States : All components are listed or exempted.

Section 15. Regulatory information

Australia	: All components are listed or exempted.
Canada	: All components are listed or exempted.
China	: Not determined.
Europe	: Not determined.
Japan	: Japan inventory (ENCS) : Not determined. Japan inventory (ISHL) : Not determined.
Malaysia	: Not determined.
New Zealand	: All components are listed or exempted.
Philippines	: All components are listed or exempted.
Republic of Korea	: All components are listed or exempted.
Taiwan	: Not determined.
Thailand	: Not determined.
Turkey	: Not determined.
Viet Nam	: Not determined.

Section 16. Other information

National Fire Protection Association (U.S.A.)



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Procedure used to derive the classification

Classification	Justification
Not classified.	

History

Date of printing	: 4/18/2018
Date of issue/Date of revision	: 4/18/2018
Date of previous issue	: No previous validation
Version	: 1

Key to abbreviations	: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Intermediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations
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References	: Not available.
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▣ Indicates information that has changed from previously issued version.

Section 16. Other information

Notice to reader

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Mystik is a registered trademark of CITGO Petroleum Corporation

SPI Supplies Division

Structure Probe, Inc.

206 Garfield Ave., West Chester, PA 19380-4512 USA

Phone: 1-(610)-436-5400 Fax: 1-(610)-436-5755

sales@2spi.com

<http://www.2spi.com>

Manufacturer's CAGE: 1P573

Safety Data Sheet

Date Effective: July 30, 2019

SPI Catalog #'s 05007-AB, 05007-DA

Thinner for Carbon Conductive Paint

Section 1.1: Identification

Chemical Name/Synonyms isopropyl alcohol, isopropanol, 2-propanol

Product or Trade Name Thinner for Carbon Conductive Paint
(Formulated for use with SPI# 5006 Carbon Paint)

CAS #'s 67-63-0

Chemical Formula..... C₃H₈O

Section 1.2: Relevant Uses/Restrictions

Thinner for SPI Catalog # 05006 Conductive Carbon Paint

Section 1.3: Supplier of the Safety Data Sheet

SPI Supplies Division

Structure Probe, Inc.

206 Garfield Ave., West Chester, PA 19380-4512 USA

Phone: 1-(610)-436-5400 Fax: 1-(610)-436-5755

sales@2spi.com

<http://www.2spi.com>

Manufacturer's CAGE: 1P573

Section 1.4: Emergency telephone number

Emergencies

Contacting CHEMTREC:

24 Hour Emergency Use Only #'s...

Worldwide phone: 1-(703)-741-5970

Toll-free phone: 1-(800)-424-9300 USA + Canada only

Section 2: Hazard Identification

2.1 Classification of the substance

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquids (Category 2)

Skin irritation (Category 3)

Eye irritation (Category 2A)
Specific target organ toxicity- single exposure (Category 3)
Specific target organ toxicity – repeated exposure
Nerves., Kidney, Cardiovascular system, Gastrointestinal tract, Liver

2.2 Label elements

Pictogram



Signal Word: Danger

Hazard statements:

H225: Highly flammable liquid and vapor.
H319: Causes serious eye irritation
H335: May cause respiratory irritation

Precautionary statements:

P210 Keep away from heat/ sparks/ open flames/ hot surfaces. – No smoking.
P233 Keep container tightly closed.
P240 Ground/ bond container and receiving equipment.
P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P264 Wash skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/ eye protection/ face protection.
P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312 Call a POISON CENTER or doctor/ physician if you feel unwell.
H336 May cause drowsiness or dizziness
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P235 Keep cool.
P405 Store locked up.
P501 Dispose of contents/ container in accordance with local, state & federal regulations.

Carcinogenicity:

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP, IARC, or OSHA.

2.3 Other Hazards:

Hazardous Material Information System USA

Health 2* (Chronic health hazard)
Fire Hazard 3
Reactivity 0
Personal Protection

NFPA Rating (estimated)

Health 1
Flammability..... 3
Reactivity 0

Section 3: Composition

3.1 Substances:

Chemical Name: Isopropanol
CAS #: 67-63-0
EC #: 200-661-7
Concentration: 100%

Section 4: First Aid Measures

4.1 Description of first aid measures:

Inhalation:

Remove to fresh air.
If not breathing, give artificial respiration.
If breathing is difficult, give oxygen.
Use oxygen as required, provided a qualified operator is present.
Call a physician.

Skin Contact:

Wash off immediately with plenty of water for at least 15 minutes.
Take off contaminated clothing and shoes immediately.
Wash contaminated clothing before re-use.
Call a physician if irritation develops or persists.

Eye Contact:

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Call a physician.

Ingestion

Do not induce vomiting without medical advice.
Immediate medical attention is required.
Never give anything by mouth to an unconscious person.
Call a physician.

Notes to physician:

Treat symptomatically.

4.2 Most important symptoms and effects, both acute and delayed:

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed:

No further relevant information available.

Section 5: Fire Fighting Measures

5.1 Extinguishing media:

Suitable extinguishing media: Alcohol-resistant foam, Carbon dioxide (CO₂), Dry chemical.
Cool closed containers exposed to fire with water spray.

Unsuitable extinguishing media: Do not use a solid water stream as it may scatter and spread fire.

5.2 Special hazards arising from the substance or mixture:

Flammable.

Vapors may form explosive mixtures with air.

Vapors are heavier than air and may spread along floors.

Vapors may travel to areas away from work site before igniting/flashing back to the vapor source.

5.3 Hazardous combustion products:

Hazardous decomposition products which may be produced under fire conditions:

Carbon monoxide (CO)

Carbon dioxide (CO₂)

5.4 Advice for firefighters:

Special protective equipment and precautions for firefighters:

Wear self-contained breathing apparatus and protective suit.

Section 6: Accidental Release Measures

6.1 Personal precautions:

Wear personal protective equipment.

Immediately evacuate personnel to safe areas.

Keep people away from and upwind of spill/ leak.

Ensure adequate ventilation.

Remove all sources of ignition.

Do not swallow.

Avoid breathing vapors, mist or gas.

Avoid contact with skin, eyes and clothing.

6.2 Environmental precautions:

Prevent further leakage or spillage if safe to do so.

Prevent product from entering drains.

Discharge into the environment must be avoided.

Do not flush into surface water or sanitary sewer system.

Do not allow run-off from fire-fighting to enter drains or water courses.

6.3 Methods and material for containment and cleaning up:

Ventilate the area.

No sparking tools should be used.

Use explosion-proof equipment.

Contain spillage.

Soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see Section 13).

6.4 Reference to other sections:

See Section 8 for personal protection equipment.

See Section 13 for information on disposal.

Section 7: Handling and Storage

7.1 Precautions for safe handling:

Protective measures:

- Wear personal protective equipment.
- Use only in well-ventilated areas.
- Keep container tightly closed.
- Do not smoke.
- Do not swallow.
- Avoid breathing vapors, mist or gas.
- Avoid contact with skin, eyes, and clothing.

7.2 Conditions for safe storage, including any incompatibilities:

- Keep away from fire, sparks and heated surfaces.
- Take precautionary measures against static discharges.
- Ensure all equipment is electrically grounded before beginning transfer operations.
- Use explosion-proof equipment.
- Keep product and empty container away from heat and sources of ignition.
- No sparking tools should be used.
- No smoking.

7.3 Specific end uses:

Thinner for SPI Catalog # 05006 Conductive Carbon Paint.

This material is not being offered for clinical or diagnostic applications, agricultural uses or for human or animal consumption.

Section 8: Exposure Controls and Personal Protection

8.1 Control parameter and Personal Protection:

Workplace exposure limits: Isopropanol CAS # 67-63-0

Value	Control parameters	Update	Basis
TWA:	(200 ppm)	2008	ACGIH:US. ACGIH Threshold Limit Values
STEL:	(400 ppm)	2008	ACGIH:US. ACGIH Threshold Limit Values
REL:	980 mg/m ³ ; (400 ppm)	2005	NIOSH/GUIDE:US. NIOSH Pocket Guide to Chemical Hazards
STEL:	1,225 mg/m ³ ; (500 ppm)	2005	NIOSH/GUIDE:US. NIOSH Pocket Guide to Chemical Hazards
PEL:	980 mg/m ³ ; (400 ppm)	02.2006	OSHA_TRANS:US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)
TWA:	980 mg/m ³ ; (400 ppm)	1989	Z1A:US. OSHA Table Z-1-A (29 CFR 1910.1000)
STEL:	1,225 mg/m ³ ; (500 ppm)	1989	Z1A:US. OSHA Table Z-1-A (29 CFR 1910.1000)

TWA=Time Weighted Average

STEL=Short Term Exposure Limit

PEL=Permissible Exposure Limit

Biological limit values: No data available.

8.2 Exposure controls:

8.2.1 Appropriate engineering controls:

- Use with local exhaust ventilation.
- Prevent vapor buildup by providing adequate ventilation during and after use.
- Ensure that eyewash stations and safety showers are close to the workstation location.

8.2.2 Individual protection measures:

Eye protection:

Do not wear contact lenses.
Wear as appropriate: safety glasses with side-shields.
If splashes are likely to occur, wear: Goggles or face shield, giving complete protection to eyes.

Hand protection:

Solvent-resistant gloves.
Gloves must be inspected prior to use.
Replace when worn.

Skin and body protection:

Wear as appropriate:
Solvent-resistant apron.
Flame retardant antistatic protective clothing.
If splashes are likely to occur, wear:
Protective suit.

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment.
For rescue and maintenance work in storage tanks use self-contained breathing apparatus. Use NIOSH approved respiratory protection.

Hygiene measures:

When using, do not eat, drink or smoke.
Wash hands before breaks and immediately after handling the product.
Keep working clothes separately.
Remove and wash contaminated clothing before re-use.
Do not swallow.
Avoid breathing vapors, mist, or gas.
Avoid contact with skin, eyes and clothing.

8.2.3 Environmental exposure controls:

Prevent product from entering drains.
Discharge into the environment must be avoided.
Do not flush into surface water or sanitary sewer system.
Do not allow run-off from fire-fighting to enter drains or water courses.

Section 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties:

Appearance: Colorless liquid

Odor: Slight alcohol-like

Odor threshold: No data available

pH: Not applicable

Melting point/Freezing point: -88 °C

Boiling point/Boiling point range: 82.3 °C

Flash Point: 54 ° F (12 ° C)

Evaporation rate: No data available

Flammability (solid, gas): No data available

Upper/lower flammability or explosive limits:

Lower: 2 %(V)

Higher: 12 %(V)

Vapor Pressure: 44 hPa at 20 °C (68 °F)

Vapor density: 2.1 (Air = 1.0)
Density: 0.785 g/cm³ at 20 °C
Solubility: Completely soluble
Partition coefficient (n-octanol/water): No data available
Ignition temperature: 399 °C
Decomposition temperature: No data available
Viscosity, dynamic: 2.1 mPa.s at 25 ° C
Explosive properties: No data available
Oxidizing Properties: No data available
Molecular weight: 60.11 g/mol

9.2 Other information: No further relevant information available.

Section 10: Stability and Reactivity

10.1 Reactivity:

10.2 Chemical Stability:

Stable under recommended storage conditions.

10.3 Possibility of Hazardous Reactions:

Hazardous polymerization does not occur.

10.4 Conditions to avoid:

Heat, flames and sparks.

Keep away from direct sunlight.

10.5 Incompatible materials:

Strong acids

Strong oxidizing agents,

Keep away from metals.

Acetaldehyde

Aluminium

Chlorine

Ethylene oxide

Isocyanates

Oxygen

May attack many attack many plastics, rubbers, and coatings.

10.6 Hazardous decomposition products:

In case of fire hazardous decomposition products may be produced such as:

Carbon monoxide (CO)

Carbon dioxide (CO₂)

Section 11: Toxicological Information

Information on the likely routes of exposure:

11.1 Information on toxicological effects:

A. Acute toxicity:

Acute oral toxicity:
LD50: 50.45 mg/kg Species: Rat
Acute inhalation toxicity:
LC50: 16,000 ppm Species: Rat
Acute dermal toxicity:
LD50: 12,800 mg/kg Species: Rabbit

B. Skin corrosion/irritation:

Skin irritation:
Result: Slight irritation Species: Rabbit

C. Serious eye damage/irritation: Eye irritation:

Result: Severe eye irritation Species: Rabbit

D. Respiratory or skin sensitization:

No data available.

E. Germ cell mutagenicity:

No data available.

F. Carcinogenicity:

IARC: Group 3: Not classifiable as to its carcinogenicity to humans.

NTP: No component of the product present at levels greater or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of the product present at levels greater or equal to 0.1% is identified as a known or anticipated carcinogen by OSHA.

G. Reproductive toxicity:

TDLo: Oral, rat 8 g/kg female 6-15 days after conception
Toxic effects: Fetotoxicity (except death) – e.g. stunted fetus

TDLo: Inhalation, rat 3500 ppm/7H female 1-19 days after conception
Toxic effects: Fetotoxicity (except death) – e.g. stunted fetus

TDLo: Inhalation, rat 10,000 ppm/7H female 1-19 days after conception
Toxic effects: Fertility – pre-implantation mortality (e.g. reduction in number of implants per female)

Toxic effects: Reproductive – effects on Embryo or Fetus – fetal death

TDLo: Inhalation, rat 7000 ppm/7H female 1-19 days after conception
Toxic effects: Specific Developmental Abnormalities – musculoskeletal system

TDLo: Oral, rabbit 6240 mg/kg female 6-18 days after conception
Toxic effects: Maternal Effects – other effects

H. STOT-single exposure:

Specific target organ toxicity- single exposure
Central nervous system

I.. STOT-repeated exposure:

Specific target organ toxicity – repeated exposure
Nerves., Kidney, Cardiovascular system, Gastrointestinal tract, Liver

J. Aspiration hazard:

No data available.

Additional information: RTECS # NT8050000.

Section 12: Ecological Information

12.1 Ecotoxicity:

Toxicity to fish:

LC50: >5 g/l, 24H Species: Carassius auratus (goldfish)

LC50: 8,970 mg/l, 48H Species: Leuciscus idus (golden orfe)

LC50: 10,4000 mg/l, 96 H Species: Pimephales promelas (fathead minnow)

Toxicity to daphnia and other aquatic invertebrates:

EC50: > 100 mg/l, 48H Species: Daphnia magna (Water flea)

Toxicity to algae:

LC50: >2,000 mg/l, 72H Species: Desmodesmus subspicatus (green algae)

Toxicity to bacteria:

EC50: 35,390 mg/l, 5 min Species: Photobacterium phosphoreum

12.2 Persistence and degradability:

Biodegradability:

Biochemical Oxygen Demand (BOD) – Biochemical oxygen demand within 5 days:

Value: 58%

12.3 Bio-accumulative potential:

Additional ecological information”

Accumulation in aquatic organisms is unlikely.

12.4 Mobility in soil:

No data available.

12.5 Results of PBT and vPvB assessment:

No data available.

12.6 Other adverse effects:

No data available.

Section 13: Disposal Considerations

13.1 Waste treatment methods:

Dispose of contents/ container in accordance with local, state, and federal regulations.

Section 14: Transport Information

DOT

UN#: UN1263

Paint Related Material

Hazard Class: 3

Flammable Liquid

Packing Group: III

IATA

UN#: UN1263
Hazard Class: 3
Packing Group: III

Paint Related Material
Flammable Liquid

Hazard Labels: 3

EmS Number: F-E, S-D

Marine pollutant: no

Section 15: Regulatory Information

15.1 Safety, health and environmental regulations/ legislation specific for the substance or mixture:

U.S. Government Regulations:

TSCA:

Isopropanol CAS # 67-63-0 is on the TSCA Active Inventory List.

SARA 302 Components:

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components:

The following components are subject to reporting levels established by SARA Title III, Section 313:

Isopropanol CAS # 67-63-0

SARA 311/312 Hazards:

Fire Hazard
Acute Health Hazard
Chronic Health Hazard

California Prop. 65:

This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

Massachusetts RTK:

Isopropanol, CAS # 67-63-0, is on the list.

New Jersey RTK:

Isopropanol, CAS # 67-63-0, is on the list.

Pennsylvania RTK:

Isopropanol, CAS # 67-63-0, is on the list.

International Regulations:

CANADA:

WHMIS Classification:

B2: Flammable liquid

D2B: Toxic Material Causing Other Toxic Effects

This product has been classified according to the hazard criteria of the CPR and the SDS contains all of the information required by the CPR.

Canadian Environmental Protection Act (CEPA), Domestic Substances List DSL:

All components of this product are on the Canadian DSL.

AUSTRALIA:

Industrial Chemical (Notification and Assessment) Act:
On the inventory, or in compliance with the inventory.

JAPAN:

Kashin-Hou Law List:
On the inventory, or in compliance with the inventory.

KOREA:

Toxic Chemical Control Law (TCCL) List:
On the inventory, or in compliance with the inventory.
KE-29363

PHILIPPINES:

The Toxic Substances and Hazardous and Nuclear Waste Control Act:
On the inventory, or in compliance with the inventory.

CHINA:

Inventory of Existing Chemical Substances:
On the inventory, or in compliance with the inventory.

NEW ZEALAND:

NZIOC:
On the inventory, or in compliance with the inventory.

15.2 Chemical Safety Assessment: A Chemical Safety Assessment has not been carried out.

Date of Preparation: 30 July 2019

Abbreviations and acronyms

IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
CMRG: Chemical Manufacturer's Recommended Guidelines
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
AIHA: American Industrial Hygiene Association
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bio-accumulative and Toxicological
vPvB: very Persistent and very Bio-accumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety Health
ATE: Acute Toxicity Estimates
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
STEL: Short Term Exposure Limit
CEIL: Ceiling
TSCA: Toxic Substances Control Act (USA)
DSL: Domestic Substances List (Canada)
PICCS: Philippine Inventory of Chemicals and Chemical Substances
ENCS: Existing and New Chemical Substances (Japan)

AICS: Australian Inventory of Chemical Substances
IECSC: Inventory of Existing Chemical Substances in China
KECL: Korea Existing Chemicals List

Section 16: Other Information

Disclaimer of Liability:

Caution! Do not use SPI Supplies products or materials in applications involving implantation within the body; direct or indirect contact with the blood pathway; contact with bone, tissue, tissue fluid, or blood; or prolonged contact with mucous membranes. Products offered by SPI Supplies are not designed or manufactured for use in implantation in the human body or in contact with internal body fluids or tissues. SPI Supplies will not provide to customers making devices for such applications any notice, certification, or information necessary for such medical device use required by US FDA (Food and Drug Administration) regulation or any other statute. SPI Supplies and Structure Probe, Inc. make no representation, promise, express warranty or implied warranty concerning the suitability of these materials for use in implantation in the human body or in contact with internal body tissues or fluids.

The information and recommendations set forth above are taken from sources believed to be accurate as of the date hereof, however SPI Supplies and Structure Probe, Inc. make no warranty with respect to the accuracy of the information or the suitability of the recommendations, and assume no liability to any user thereof. The information contained in this sheet does not constitute a hazard assessment and should not be used in place of the user's own assessment of work place risks as required by other health and safety legislation. Be aware of the Structure Probe, Inc. Copyright Policy. Structure Probe, Inc. grants a nonexclusive license to make unlimited copies of this safety sheet for internal use only. Quite obviously, this information would pertain only to this material when purchased from SPI Supplies as product from other sources, with other ingredients and impurity levels could have substantially different properties.



SAFETY DATA SHEET

1. Product and Company Identification

Product Name	OZ CLEAN
Product Number	3CB
Product Type	Mixture
Product Use	Ozone compatible carpet cleaner.
Manufacturer	CFR, A Division of Tacony Corporation 3101 Wichita Court Fort Worth, TX 76140-1710
Company Contact	1-800-533-2557 or website www.cfrcorp.com
Emergency Telephone Number	1-800-270-5201

2. Hazards Identification

GHS Classification in accordance with 29CFR 1910 OSHA HCS

Skin corrosion/irritation, (Category 3) H316
Serious eye damage/eye irritation, (Category 2B) H320
Chronic aquatic toxicity, (Category 4) H413

GHS Label elements, including precautionary statements

Pictogram None required

Signal Word Warning

Hazard Statements

H316 Causes mild skin irritation.
H320 Causes eye irritation.
H413 May cause long lasting harmful effects to aquatic life.

Precautionary Statements

Prevention

P264 Wash and rinse hands and exposed skin after handling concentrated product.
P273 Avoid release to the environment.

Response

P332+P313 If skin irritation occurs, get medical attention.
P305+P351+P338 IF IN EYES, Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists, get medical attention.

Storage/Disposal

P501 Dispose of contents/container in accordance with local, regional and federal regulations

3. Composition/Information on Ingredients

The criteria for listing components in this section are: Ingredients that meet the criteria for carcinogenic, toxic to reproduction, or specific target organ toxicity and components otherwise considered hazardous according to OSHA which exceed the cut off limits for SDS specified by the criteria for mixtures are listed. Non hazardous components are not listed. This is not a composition disclosure. Exact percentages are considered proprietary and a trade secret.



Hazardous Components	CAS#	Classification	%
Sodium Bicarbonate	533-96-0	H320	1-10%
Tetrapotassium pyrophosphate	7320-34-5	H315, H319, H413	1-5%
Sodium Carbonate	497-19-8	H320	1-5%

4. First Aid Measures

Description of First Aid Procedures

In case of Eye Contact	Flush with cool running water for 15 minutes. If irritation persists, get medical attention.
In case of Skin Contact	Flush with cool water, Wash with soap and water, If irritation persists, get medical Attention.
If Inhaled	If symptoms develop, move to fresh air. If symptoms persist, get medical attention
If Ingested	Rinse mouth with water. Drink one or two glasses of water. Do not induce vomiting. Obtain medical attention. Never give anything by mouth to an unconscious person.
Notes to Physician	Symptoms may be delayed.
General advice	Seek medical attention if feeling unwell. Show the SDS to the physician in attendance.

5. Fire-fighting Measures

Flammable properties	Not flammable
Extinguishing media	Treat for surrounding material.
Protection of firefighters	Firefighters should wear protective clothing including self contained breathing apparatus
Hazardous combustion products	May include and not limited to oxides of carbon and oxides of sulfur.
Unusual Fire, Explosion hazards	None known.

6. Accidental Release Measures

Personal precautions	Keep unnecessary personal away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled containers unless wearing protective Clothing. Stay upwind of spills or leaks.
Methods for containment	Stop leak if you can do so without risk. Prevent entry into waterways, sewers.
Methods for cleaning up	Before attempting clean up refer to hazard data given above. Small spills may be absorbed with non reactive absorbent and placed in suitable, covered, labeled containers. Prevent large spills from entering sewers or water ways. Dike spill. Absorb spill with non reactive absorbent and place in a suitable, covered, labeled container for disposal. Never return spill to original container for reuse.
Environmental Precautions	Avoid release to the environment.

7. Handling and Storage

Precautions for Safe Handling	Use good industrial hygiene practices when handling this material
Conditions for Safe Storage	Keep out of reach of children. Keep from freezing, store in a cool dry place away from incompatible materials.

8. Exposure Controls and Personal Protection

Exposure limits			
Ingredients	CAS-No	OSHA PEL	ACGIH TLV
Sodium bicarbonate	533-96-0	15 mg/m ³ total dust, 5mg/m ³ (resp. fraction)	Not established
Sodium carbonate	497-19-8	Not established	Not established
Tetrapotassium pyrophosphate	7320-34-5	Not established	Not established



Engineering controls	General ventilation normally adequate
Personal protective equipment	
Eye/Face protection	Wear safety glasses with side shields if splash conditions exist.
Hand protection	Rubber or nitrile gloves.
Skin and body	As required by employer code.
Respiratory protection	Use a NIOSH approved respirator when exposure guidelines are exceeded.
General hygiene considerations	Handle in accordance with good industrial hygiene practices. Do not eat or drink when using product. Wash hands well before breaks and immediately after handling the product.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance/form	Clear liquid
Color	Colorless
Odor	Characteristic
Odor threshold	Not established
pH	9.0-9.2 (Concentrate)
Melting point/freezing point	Not established
Initial Boiling point	> 212° F. (100° C.)
Flash point	Not established
Evaporation rate	Not established
Flammability	Not flammable
Upper/lower flammability or Explosive limits	Not applicable
Vapor pressure	Not established
Vapor density	Not established
Specific gravity/density	1.03-1.05
Solubility in water	Complete
Partition coefficient:	Not established
Auto ignition temperature	Not established
Decomposition temperature	Not established
Stability and Reactivity	Stable and non reactive under normal use and storage conditions.
VOC	< 1%
% Volatile	Approx. 85%

Other safety Information

10. Stability and Reactivity

Reactivity	Not reactive under normal use and storage.
Chemical Stability	Stable under normal storage conditions.
Hazardous reactions	None known.
Conditions to avoid	Do not mix with other chemicals.
Incompatible materials	Strong acids and oxidizers.
Hazardous decomposition products	May include but not limited to oxides of carbon, and oxides of sulfur.
Hazardous polymerization	Will not occur.

11. Toxicological Information

Ingredients	LC50
Sodium bicarbonate	> 5.03 mg/l 4 hours - inhalation rat
Sodium carbonate	800 mg/m ³ inhalation guinea pig, 1150 mg/m ³ inhalation rat
Tetrapotassium pyrophosphate	No data available
Ingredients	LD50
Sodium bicarbonate	5600 mg/kg (Oral-rat)
Sodium carbonate	2800 mg/kg (Oral-rat) , > 2000 mg/kg (Dermal-rabbit)
Tetrapotassium pyrophosphate	> 1000 mg/kg (Oral-rabbit), 4640 mg/kg (Dermal-rabbit)



Effects of acute exposure

Eye	Causes eye irritation
Skin	Causes mild irritation.
Inhalation	Not normally a route of entry.
Ingestion	May be harmful if swallowed. May cause stomach distress, nausea, or vomiting.

Sensitization	No data available.
Chronic effects of short and long term exposure	Prolonged exposure to skin may cause drying, defatting and irritation.
Carcinogenicity	Does not contain ingredients considered carcinogenic by NTP, IARC, or OSHA.
Mutagenicity	No data available.
Reproductive effects	No data available.
Teratogenicity	No data available.

12. Ecological Information

Eco-toxicity	Components of this product have been identified as having potential environmental concerns.
Environmental effects	No data available.
Aquatic toxicity Sodium carbonate	LC50 Fish (Lepomis macrochirus): 300 mg/L (static) 96 hour EC50 Akgae (Nitzschia): 242mg/L 120 hour
Persistence and Degradability	The alkalinity of the phosphate may be reduced in natural waters, but the resulting phosphate may persist indefinitely or incorporate into biological systems.
Bioaccumulation/accumulation	No data available.
Partition coefficient	No data available.
Mobility in environmental media	No data available.
Chemical fate information	No data available.
Other adverse effects	No data available.

13. Disposal Considerations

Disposal instructions	Dispose in accordance with local, state, and federal regulations
Wastes from residues/unused Product	Containerize. Rinse area with water. Keep out of storm sewer/waterways.
Contaminated packaging	Dispose in accordance with all applicable regulations.

14. Transport Information

Basic shipping requirements:	Not DOT regulated
Proper shipping name	
Hazard class	
UN number	
Packing group	
Special provisions	

15. Regulatory Information

U.S federal regulations	This product has been classified in accordance with the Occupational Safety and Health Administration hazard criteria and the SDS contains all of the information required by OSHA HCS 2012.
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TSCA All ingredients are listed on the Toxic Substances Control Act or are exempt from listing.

CERCLA Super Fund 40CFR117.302 Product contains a material with a Reportable Quantity (RQ):
None

SARA Title III Section 311&312 Immediate (Acute) Health Hazard
Sodium carbonate

SARA Title III Section 313 Ingredients subject to the reporting requirements of Section 313:
None

California Proposition 65 This product does not contain intentional ingredients known to the State of California to cause cancer, birth defects or reproductive effects.

States Right to Know Reportable Chemicals:
None

Inventory Status

Countries	Inventory Name	On Inventory (Yes/No)*
U.S.	Chemical Inventory List	Yes
Canada	Domestic substances list	Yes

- A "Yes" indicates that all of the components of this product comply with the inventory requirements administered by the governing country(s) listed.

16. Other Information

HMIS RATING

HMIS LEGEND

Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	

Health	1
Flammability	0
Reactivity	0
Personal Protection	B

Disclaimer

To the best of our knowledge, the information included herein is accurate. However, neither the above named supplier nor any of its subsidiaries assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of the suitability of any material is the responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Issue date

March 10, 2014

Supersedes date

Previous issues.

Reason for update

Conform to GHS OSHA HCS 2012.

Expiration date

March 10, 2017

Safety Data Sheet



Hazardous Substance, Dangerous Goods

1. MATERIAL AND SUPPLY COMPANY IDENTIFICATION

Product Name **Peel Away 1**

Product Code : PA1

Product Use : As a high quality water based caustic paint stripper for interior/exterior use for removing alkyd based paints from wood, bricks, cast iron and fibreglass.

Company Name : Haymes Paint

ABN : 14 004 201 638

Address : Waringa Drive, Wendouree Industrial Park, Victoria 3355, Australia.

Emergency Telephone : **03 5342 6200 . Office Hours : 7-30 to 5-30 Monday to Friday.**

Telephone Number/Fax : Tel: 03 5342 6200 . Office Hours : 7-30 to 5-30 Monday to Friday.

2. HAZARDS IDENTIFICATION

GHS Classification : This material is hazardous according to health criteria of Safe Work Australia. HAZARDOUS SUBSTANCE.

Hazard Pictograms :



Exclamation mark



Health hazard



Corrosion

SIGNAL WORD : **Danger**

Hazard Classification : Corrosive to metals - Category 1
Skin corrosion - Category 1A
Eye irritation - Category 1
Respiratory sensitiser - Category 1A
Specific Target Organ Toxicity (Single Exposure) - Category 3

Hazard Statement(s) : H290 : May be corrosive to metals.
H314 : Causes severe skin burns and eye damage.
H318 : Causes serious eye damage.
H334 : May cause allergy, or asthma symptoms, or breathing difficulties if inhaled.
H335 : Exposure via inhalation may cause respiratory irritation.

Precautionary Statement(s) :

Prevention : P102 : Keep out of reach of children.
P103 : Read label before use.
P260 : Do not breathe dust/fumes/gas/mist/vapours/spray.
P261 : Avoid breathing mist, vapours or spray.
P264 : Wash exposed skin thoroughly after handling.
P271 : Use only outdoors or in a well-ventilated area.
P280 : Wear eye protection/face protection.
P285 : In case of inadequate ventilation wear respiratory protection.

Response : P301+330+331 : IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+350+351 : IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P363 : Wash contaminated clothing before reuse.
P304+340 : IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P310 : Immediately call a POISON CENTRE or doctor/physician.

Product name : Peel Away 1
Issued : 15/2/18
Version : 1.2

Safety Data Sheet



Response continued : P321 : Specific treatment (see First Aid Measures on this SDS).
P305+351+338 : IF IN EYES, rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P342+311 : If experiencing respiratory symptoms : Call a POISON CENTRE or doctor/physician.
P312 : Call a POISON CENTRE or doctor/physician if you feel unwell.

Storage : P403+233 : Store in a well ventilated place. Keep container tightly closed.
P405 : Store locked up.

Disposal : P501 : Dispose of contents/container in accordance with local, regional, national, international regulations.

SUSMP Poisons Schedule : **S6 Poison**

Dangerous Goods Classification : Classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road and Rail".
Class 8 Corrosive liquid

3. COMPOSITION INFORMATION

Chemical Entity	CAS NO	Proportion
Calcium hydroxide	1305-62-0	15 - 25 %
Sodium hydroxide	1310-73-2	5 - 15 %
Ingredients determined not to be hazardous :	-	Balance
		<hr/> 100%

4. FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone Australia 131 126).

Inhalation : Remove victim from exposure. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist.

Skin : For gross contamination, immediately drench with water and remove clothing. Continue to flush skin and hair with plenty of water (and soap if material is available). If swelling, redness, blistering, or irritation occurs seek immediate medical assistance.

Eye : If in eyes, hold eyelids apart and rinse the eyes continuously with running water. Remove contact lenses if present and easy to do. Continue rinsing for several minutes until all contaminants are washed out completely. Immediately call a doctor. Continue rinsing.

Ingestion : If swallowed rinse mouth. Do NOT induce vomiting. Call a Poisons information Centre or doctor if you feel unwell.

Symptoms and effects that may arise if the product is mishandled and overexposure occurs are :

Inhalation : Breathing difficulties, irritation, coughing.

Skin contact : Burning pain, irritation, redness.

Eye contact : Burning pain, irritation, watering, redness.

Ingestion : Vomiting, dizziness, convulsions, abdominal pains and diarrhea.

Advice to First Aiders : Be aware of the material(s) involved, and wear protective equipment if there is a risk of inhalation or skin and eye contamination.

First Aid Facilities : Eye wash and normal washroom facilities.

Advice to Doctor : Treat symptomatically.

Product name : Peel Away 1
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5. FIRE-FIGHTING MEASURES

Hazchem Code :	2X
Suitable extinguishing media :	Use water fog to cool containers and prevent rupture and explosion by internal expansion.
Specific hazards :	Product is a caustic water based paste which does not sustain combustion. It can react with metals such as zinc, aluminium and tin and acids causing the generation of heat and possible explosions. Water diluted product from heat ruptured containers is also reactive. Spattered residues from an explosion will cause skin and eye burns.
Fire fighting further advice :	Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to products of decomposition. Prevent any possible contamination of drains and waterways.

6. ACCIDENTAL RELEASE MEASURES

Small Spills :	Wear protective equipment to prevent skin and eye contamination. Avoid inhalation of vapours. Wipe up with absorbent (clean rag or paper towels). Collect and seal in properly labelled containers or drums for disposal.
Large Spills :	Shut off all possible sources of ignition. Clear area of all unprotected personnel. Prevent further leakage or spillage if safe to do so. Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contamination and the inhalation of vapours. Work up wind or increase ventilation. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Use a spark free shovel. Collect and seal in properly labelled containers or drums for disposal. If contamination of sewers or waterways has occurred advise local emergency services.

Dangerous Goods - Initial Emergency Response Guide No : **37**

7. HANDLING AND STORAGE

Handling :	Avoid skin and eye contact and inhalation of vapour, mist or aerosols.
Storage :	Store in a cool, dry, well-ventilated place and out of direct sunlight. Store away from incompatible materials described in Section 10. Keep containers closed when not in use. Check regularly for leaks. This material is described as a Dangerous Good Class 8 Corrosive Liquid as per the criteria of the Australian Dangerous Goods Code and must be stored in accordance with the relevant regulations. This material is a Scheduled Poison S6 and must be stored, maintained and used in accordance with the relevant regulations.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Control Parameters : No value assigned for this specific product by Safe Work Australia. However, Workplace Standard(s) for constituent(s) are :

Chemical Entity	TWA		STEL		Carcinogen Category	Notices
	ppm	mg/m ³	ppm	mg/m ³		
Calcium hydroxide	-	5	-	-	-	-
Sodium hydroxide	-	2	Peak limitation		-	-

As published by Safe Work Australia

TWA - the time-weighted average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life.

STEL (Short Term Exposure Limit) - the average airborne concentration over a 15-minute period, which should not be expected at any time during a normal eight-hour workday.

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These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

If directions for use are followed, exposure of individuals using the product should not exceed the above standard. The standard was created for workers who are routinely, potentially exposed during product manufacture.

Engineering Controls : Ensure ventilation is adequate and that air concentrations are controlled below quoted Workplace Exposure Standards. Close with lid when not in use.

Personal protection equipment : **OVERALLS, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES.**

Wear overalls, safety glasses and impervious gloves. Use with adequate ventilation. If inhalation risk exists wear organic vapour/particulate respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Available information suggests that gloves made from nitrile rubber should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment.

Hygiene measures : Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	White viscous paste.
Odour :	Slight
Odour Threshold :	Not Available
Solubility :	Soluble in water.
Specific Gravity (20 °C) :	1.2 - 1.5
Relative Vapour Density (air=1) :	Approximately 1
Vapour Pressure (20 °C) :	As for water
Flash Point (°C) :	Not Applicable
Flammability Limits (%) :	Not Applicable
Autoignition Temperature (°C) :	Not Applicable
Melting Point/Range (°C) :	Not Applicable
Boiling Point/Range (°C) :	100°C
Decomposition Point (°C) :	Not Available
pH :	10-12
Viscosity (Kinematic @ 40 °C) :	Not Available
Total VOC (g/litre) :	Not Available

10. STABILITY AND REACTIVITY

Reactivity :	The solution in water is a strong base, it reacts violently with acid and is corrosive.
Chemical stability :	Stable under normal conditions.
Hazardous reactions :	Addition of chemicals such as acids may cause the generation of heat and possible explosion.
Conditions to avoid :	Contact with incompatible materials.
Incompatible materials :	Do not put into contact with metals such as aluminium, zinc or tin.
Hazardous decomposition products :	Will react with aluminium to produce hydrogen which is flammable and explosive.

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11. TOXICOLOGICAL INFORMATION

Information on toxicological effects :

Acute toxicity - Inhalation :	Insufficient information available for classification.
Acute toxicity - Skin contact :	Insufficient information available for classification.
Acute toxicity - Ingestion :	This product has been classified as Non-hazardous. Acute Toxicity Estimate based on ingredients : LD50 > 2000 mg / kg.
Skin corrosion/irritation :	This product is classified as a Category 1A Hazard. Causes severe skin burns and eye damage.
Serious eye damage/irritation :	This product is classified as a Category 1 Hazard. Causes serious eye damage.
Respiratory Sensitisation :	This product is classified as a Category 1A Hazard. May cause allergy, or asthma symptoms, or breathing difficulties if inhaled.
Skin Sensitisation :	This product has been classified as Non-hazardous.
Aspiration hazard :	This product has been classified as Non-hazardous.
Specific target organ toxicity (single exposure) :	This product is classified as a Category 3 Hazard. Exposure via inhalation may effect the respiratory tract.
Chronic Toxicity :	
Mutagenicity :	This product has been classified as Non-hazardous.
Carcinogenicity :	This product has been classified as Non-hazardous.
Reproductive toxicity:	This product has been classified as Non-hazardous.
Specific target organ toxicity (repeat exposure) :	This product has been classified as Non-hazardous.
Likely routes of exposure :	Routes of entry anticipated : Inhalation. skin and eye.

No adverse health effects expected if material is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are :

Potential acute health effects :

Inhalation :	May cause allergy, or asthma symptoms, or breathing difficulties if inhaled. May cause respiratory irritation.
Skin contact :	Corrosive to skin - may cause skin burns. Contact with skin will result in severe irritation.
Eye contact :	Corrosive to eyes. Risk of serious damage to eyes.
Ingestion :	Chemical burns of the digestive tract.

Symptoms related to the physical, chemical and toxicological characteristics :

Inhalation :	Breathing difficulties, irritation, coughing.
Skin contact :	Burning pain, irritation, redness.
Eye contact :	Burning pain, irritation, watering, redness.
Ingestion :	Vomiting, dizziness, convulsions, abdominal pains and diarrhea.

Delayed and immediate effects and also chronic effects from short and long term exposure :

Inhalation :	No information available for this product.
Skin contact :	Prolonged or repeated contact can lead to irritation and/or irritant contact dermatitis.
Eye contact :	Permanent eye damage, including loss of sight, may occur.
Ingestion :	No information available for this product.

12. ECOLOGICAL INFORMATION

Avoid contaminating drains and waterways.

Acute aquatic hazard :	No information available to complete an assessment.
Long-term aquatic hazard :	No information available to complete an assessment.
Ecotoxicity :	No information available.
Persistence and degradability :	No information available.
Bioaccumulative potential :	No information available.
Mobility :	No information available.

13. DISPOSAL CONSIDERATIONS

Persons conducting disposal, recycling or reclamation activities should ensure that appropriate personal protection equipment is used, see "Section 8. Exposure Controls and Personal Protection" of this SDS.

If possible material and its container should be recycled. If material or container cannot be recycled dispose in accordance with local, regional, national and international regulations.

14. TRANSPORT INFORMATION

Road and Rail Transport :	Classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road and Rail".
UN number :	3266
Dangerous Goods Class :	8
Packing Group :	II
Hazchem Code :	2X
Emergency Response Guide No :	37
Proper Shipping Name :	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.
Segregation Dangerous Goods :	Not to be loaded with explosives (Class 1), dangerous when wet (Class 4.3), oxidising agents (Class 5.1), organic peroxides (Class 5.2), if the Class 6 dangerous goods are cyanides - (Class 6), radioactive substances (Class 7), any Class 8 strong alkalis, foodstuffs or food packaging, however exemptions may apply.
Marine Transport :	Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.
UN number :	3266
Dangerous Goods Class :	8
Packing Group :	II
Hazchem Code :	2X
Emergency Response Guide No :	37
Proper Shipping Name :	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.
Air Transport :	Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.
UN number :	3266
Dangerous Goods Class :	8
Packing Group :	II
Hazchem Code :	2X
Emergency Response Guide No :	37
Proper Shipping Name :	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.

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15. REGULATORY INFORMATION

This product/constituent(s) is/are covered by the following requirements :

This material is hazardous according to health criteria of Safe Work Australia. HAZARDOUS SUBSTANCE.

Classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road and Rail".

The Standard for the Uniform Scheduling of Medicines and Poisons No. 7.

S6 Poison

All the constituents of this product are listed on the Australian Inventory of Chemical Substances (AICS), or exempted.

16. OTHER INFORMATION

This Safety Data Sheet has been prepared by Haymes Paint Technical Department.

Reason(s) for issue : Amended Transport Information.

Literature References : Globally Harmonised System of Classification and labelling of Chemicals (GHS), 3rd revised edition, United Nations, 2009.
Guidance on the Classification of Hazardous Chemicals under the WHS Regulations - Implementation of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) - Safe Work Australia.
Australian Inventory of Chemical Substances.
European Chemicals Agency (ECHA).

This SDS summarises at the date of issue our best knowledge of the health and safety hazard information of the product, and in particular how to safely handle and use the product in the workplace. Since Haymes Paint cannot anticipate or control the conditions under which the product may be used, prior to usage, review the SDS in the context of how the user intends to handle and use the product in the workplace.

If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.

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A06639 ARAMSCO RAMTACK ADH 20net12

Version 3.0

Revision Date 08/31/2015

Print Date 09/17/2015

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : ARAMSCO RAM-TACK SPRAY ADHESIVE

Material number : 000000000001004306 / A06639

Manufacturer or supplier's details

Company : ARAMSCO

Address : 1480 Grandview Avenue
Paulsboro, NJ 08066

Telephone : 800-767-6933

Emergency telephone numbers

For SDS Information : 800-767-6933

For a Medical Emergency :

**For a Transportation
Emergency** : CHEMTREC:800-424-9300

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	Aerosol containing a liquefied gas
Colour	tan
Odour	solvent-like

GHS Classification

Flammable aerosols : Category 1
Gases under pressure : Liquefied gas
Skin irritation : Category 2
Eye irritation : Category 2A
Specific target organ toxicity - single exposure : Category 3 (Central nervous system)

GHS Label element

Hazard pictograms : 

Signal word : Danger

Hazard statements : H222 Extremely flammable aerosol.
H280 Contains gas under pressure; may explode if heated.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

Precautionary statements : **Prevention:**
P210 Keep away from heat/sparks/open flames/hot surfaces.
No smoking.

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P211 Do not spray on an open flame or other ignition source.
P251 Pressurized container: Do not pierce or burn, even after use.

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P264 Wash skin thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear eye protection/ face protection.

P280 Wear protective gloves.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P304 + P340 + P312 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P332 + P313 If skin irritation occurs: Get medical advice/ attention.

P337 + P313 If eye irritation persists: Get medical advice/ attention.

P362 Take off contaminated clothing and wash before reuse.

Storage:

P405 Store locked up.

P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.

Disposal:

Dispose of contents/container in accordance with local regulation.

Potential Health Effects

Carcinogenicity:

IARC

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

OSHA

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components

Chemical Name	CAS-No.	Concentration [%]
propane	74-98-6	>= 20 - < 30
acetone	67-64-1	>= 20 - < 30
butane	106-97-8	>= 10 - < 20
Naphtha (petroleum), hydrotreated light	64742-49-0	>= 10 - < 20
methyl acetate	79-20-9	>= 5 - < 10

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SECTION 4. FIRST AID MEASURES

- General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.
- If inhaled : If unconscious place in recovery position and seek medical advice.
Consult a physician after significant exposure.
- In case of skin contact : If on skin, rinse well with water.
If on clothes, remove clothes.
Wash off immediately with plenty of water for at least 15 minutes.
- In case of eye contact : Rinse immediately with plenty of water for at least 15 minutes.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
- If swallowed : Keep respiratory tract clear.
DO NOT induce vomiting unless directed to do so by a physician or poison control center.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
Take victim immediately to hospital.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Carbon dioxide (CO₂)
Dry chemical
Water spray jet
Alcohol-resistant foam
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : Carbon dioxide (CO₂)
Carbon monoxide
Smoke
- Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
For safety reasons in case of fire, cans should be stored separately in closed containments.
Use a water spray to cool fully closed containers.

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Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
Ensure adequate ventilation.
Remove all sources of ignition.
Evacuate personnel to safe areas.
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Avoid exposure - obtain special instructions before use.
Avoid contact with skin and eyes.
For personal protection see section 8.
Do not breathe vapours or spray mist.
Take precautionary measures against static discharges.
Provide sufficient air exchange and/or exhaust in work rooms.
Dispose of rinse water in accordance with local and national regulations.
Always replace cap after use.

Conditions for safe storage : BEWARE: Aerosol is pressurized. Keep away from direct sun exposure and temperatures over 50 °C. Do not open by force or throw into fire even after use. Do not spray on flames or red-hot objects.
No smoking.
Keep container tightly closed in a dry and well-ventilated place.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Observe label precautions.
Electrical installations / working materials must comply with the technological safety standards.

Materials to avoid : Strong oxidizing agents

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of	Control parameters /	Basis
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		exposure)	Permissible concentration	
propane	74-98-6	TWA	1,000 ppm	ACGIH
		TWA	1,000 ppm 1,800 mg/m ³	NIOSH REL
		TWA	1,000 ppm 1,800 mg/m ³	OSHA Z-1
		TWA	1,000 ppm 1,800 mg/m ³	OSHA P0
acetone	67-64-1	TWA	500 ppm	ACGIH
		STEL	750 ppm	ACGIH
		TWA	250 ppm 590 mg/m ³	NIOSH REL
		TWA	1,000 ppm 2,400 mg/m ³	OSHA Z-1
		TWA	750 ppm 1,800 mg/m ³	OSHA P0
		STEL	1,000 ppm 2,400 mg/m ³	OSHA P0
butane	106-97-8	TWA	800 ppm 1,900 mg/m ³	NIOSH REL
		TWA	800 ppm 1,900 mg/m ³	OSHA P0
methyl acetate	79-20-9	TWA	200 ppm	ACGIH
		STEL	250 ppm	ACGIH
		TWA	200 ppm 610 mg/m ³	NIOSH REL
		ST	250 ppm 760 mg/m ³	NIOSH REL
		TWA	200 ppm 610 mg/m ³	OSHA Z-1
		TWA	200 ppm 610 mg/m ³	OSHA P0
		STEL	250 ppm 760 mg/m ³	OSHA P0

Biological occupational exposure limits

Component	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
2-PROPANONE	67-64-1	Acetone	Urine	End of shift (As soon as possible after exposure ceases)	50 mg/l	ACGIH BEI

Personal protective equipment

Respiratory protection : Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.

Hand protection
Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

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Eye protection	: Ensure that eyewash stations and safety showers are close to the workstation location. Safety glasses
Skin and body protection	: Impervious clothing Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Hygiene measures	: When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Aerosol containing a liquefied gas
Colour	: tan
Odour	: solvent-like
Odour Threshold	: No data available
pH	: No data available
Melting point/freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Evaporation rate	: No data available
Flammability (solid, gas)	: Extremely flammable aerosol.
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: No data available
Density	: 0.853 g/cm ³
Solubility(ies)	
Water solubility	: partly soluble
Solubility in other solvents	: not determined
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: not determined
Thermal decomposition	: No data available
Viscosity	
Viscosity, kinematic	: No data available
Heat of combustion	: 40.94 kJ/g

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SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Stable
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Vapours may form explosive mixture with air. No decomposition if stored and applied as directed.
Conditions to avoid	: Heat, flames and sparks. Extremes of temperature and direct sunlight.
Incompatible materials	: Strong oxidizing agents
Hazardous decomposition products	: Carbon dioxide (CO ₂) Carbon monoxide

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Components:

propane:

Acute inhalation toxicity	: LC50 Mouse: 1,237 mg/l Exposure time: 2 h
	LC50 Rat: 658 mg/l Exposure time: 4 h
	LC50 Rat: 1,355 mg/l

acetone:

Acute oral toxicity	: LD50 Rat: 5,800 mg/kg
Acute inhalation toxicity	: LC50 Rat: 132 mg/l Exposure time: 3 h
	LC50 Rat: 50.1 mg/l
Acute dermal toxicity	: LD50 Guinea pig: > 7,426 mg/kg
	LD50 Rabbit: > 7,426 mg/kg

butane:

Acute inhalation toxicity	: LC50 Mouse: 1,237 mg/l Exposure time: 2 h
	LC50 Rat: 1,355 mg/l

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Skin corrosion/irritation

Product:

Remarks: Irritating to skin.

Serious eye damage/eye irritation

Product:

Remarks: Irritating to eyes.

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

propane:

acetone:

butane:

Naphtha (petroleum), hydrotreated light:

methyl acetate:

STOT - single exposure

No data available

STOT - repeated exposure

No data available

Aspiration toxicity

No data available

Further information

Product:

Remarks: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting., Concentrations substantially above the TLV value may cause narcotic effects., Solvents may degrease the skin.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

No data available

Persistence and degradability

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No data available

Bioaccumulative potential

Product:

Partition coefficient: n-octanol/water : Remarks: No data available

Components:

butane :

Partition coefficient: n-octanol/water : Pow: 2.89

Mobility in soil

No data available

Other adverse effects

No data available

Product:

Regulation 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances

Remarks This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Toxic to aquatic life.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : The product should not be allowed to enter drains, water courses or the soil.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Dispose of in accordance with local regulations.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.
Do not burn, or use a cutting torch on, the empty drum.

SECTION 14. TRANSPORT INFORMATION

Transportation Regulation: 49 CFR (USA):
ORM-D, CONSUMER COMMODITY

Transportation Regulation: IMDG (Vessel):
UN1950, AEROSOLS, 2.1, - Limited quantity

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Transportation Regulation: IATA (Cargo Air):
UN1950, Aerosols, flammable, 2.1, - Limited quantity

Transportation Regulation: IATA (Passenger Air):
UN1950, Aerosols, flammable, 2.1, - Limited quantity

Transportation Regulation: TDG (Canada):
UN1950, AEROSOLS, 2.1, - Limited quantity

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
acetone	67-64-1	5000	*

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Acute Health Hazard
Fire Hazard
Sudden Release of Pressure Hazard

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop 65 WARNING! This product contains a chemical known to the State of California to cause cancer.
benzene 71-43-2
WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.
toluene 108-88-3
benzene 71-43-2

The components of this product are reported in the following inventories:

TSCA On TSCA Inventory
DSL All components of this product are on the Canadian DSL
AICS On the inventory, or in compliance with the inventory
NZIoC Not in compliance with the inventory
PICCS On the inventory, or in compliance with the inventory
IECSC On the inventory, or in compliance with the inventory

Inventory Acronym and Validity Area Legend:

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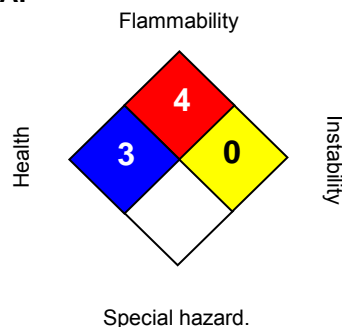
Print Date 09/17/2015

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

SECTION 16. OTHER INFORMATION

Further information

NFPA:



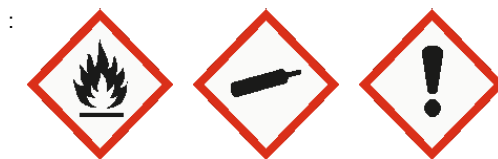
HMIS III:

HEALTH	3
FLAMMABILITY	4
PHYSICAL HAZARD	2

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

OSHA GHS Label Information:

Hazard pictograms



Signal word

: **Danger:**

Hazard statements

: Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness.

Precautionary statements

:
Prevention: Keep away from heat/sparks/open flames/hot surfaces. No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. Wash skin thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear eye protection/ face protection. Wear protective gloves.
Response: IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation occurs: Get medical advice/ attention. If eye irritation persists: Get medical advice/ attention. Take off contaminated clothing and wash before reuse.
Storage: Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.
Disposal: Dispose of contents/container in accordance with local regulation.

Version:	3.0
Revision Date:	08/31/2015
Print Date:	09/17/2015

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. Users should make their own investigations

SAFETY DATA SHEET

A06639 ARAMSCO RAMTACK ADH 20net12

Version 3.0

Revision Date 08/31/2015

Print Date 09/17/2015

to determine the suitability and applicability of the information for their particular purposes.
This SDS has been prepared by the Compliance Services organization supporting this
manufacturer, supplier or distributor.

Safety Data Sheet



1. Identification

Product Name: ICWB LSPR 12PK FLUORESCENT ORANGE MARKNG **Revision Date:** 8/7/2018

Product Identifier: 203036 **Supersedes Date:** 3/14/2018

Recommended Use: Marking Paint/Alkyd

Supplier: Rust-Oleum Corporation
11 Hawthorn Parkway
Vernon Hills, IL 60061
USA

Manufacturer: Rust-Oleum Corporation
11 Hawthorn Parkway
Vernon Hills, IL 60061
USA

Rust-Oleum Canada (ROCA)
200 Confederation Parkway
Concord, ON L4K 4T8
Canada
Emergency Phone: 800-387-3625

Preparer: Regulatory Department

Emergency Telephone: 24 Hour Hotline: 847-367-7700

2. Hazard Identification

Classification

Symbol(s) of Product



Signal Word

Danger

Possible Hazards

29% of the mixture consists of ingredient(s) of unknown acute toxicity.

GHS HAZARD STATEMENTS

Flammable Aerosol, category 1	H222	Extremely flammable aerosol.
Compressed Gas	H280	Contains gas under pressure; may explode if heated.
Carcinogenicity, category 2	H351	Suspected of causing cancer.
STOT, repeated exposure, category 2	H373	May cause damage to organs through prolonged or repeated exposure.

GHS LABEL PRECAUTIONARY STATEMENTS

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50°C / 122°F.
P410+P403	Protect from sunlight. Store in a well-ventilated place.
P201	Obtain special instructions before use.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local, regional and national regulations.
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P314	Get medical advice/attention if you feel unwell.

3. Composition / Information On Ingredients

HAZARDOUS SUBSTANCES

<u>Chemical Name</u>	<u>CAS-No.</u>	<u>Wt.%</u>	<u>GHS Symbols</u>	<u>GHS Statements</u>
Propane	74-98-6	17	GHS04	H280
n-Butane	106-97-8	8.0	GHS04	H280
Naphtha, Petroleum, Hydrotreated Light	64742-49-0	6.7	GHS08	H304
Hydrotreated Light Distillate	64742-47-8	5.3	GHS08	H304
Xylenes (o-, m-, p- isomers)	1330-20-7	4.4	GHS02-GHS07	H226-315-319-332
Ethylbenzene	100-41-4	1.1	GHS02-GHS07- GHS08	H225-304-332-351-373
Stoddard Solvent	8052-41-3	0.7	GHS08	H304-372
Pigment Orange 13	3520-72-7	0.2	Not Available	Not Available
Crystalline Silica / Quartz	14808-60-7	0.1	Not Available	Not Available

4. First-Aid Measures

FIRST AID - EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids open. Get medical attention. Do NOT allow rubbing of eyes or keeping eyes closed.

FIRST AID - SKIN CONTACT: Wash skin with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists.

FIRST AID - INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention. Do NOT use mouth-to-mouth resuscitation. If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.

FIRST AID - INGESTION: Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. Get immediate medical attention. If swallowed, get medical attention.

5. Fire-Fighting Measures

EXTINGUISHING MEDIA: Alcohol Film Forming Foam, Carbon Dioxide, Dry Chemical, Dry Sand, Water Fog

UNUSUAL FIRE AND EXPLOSION HAZARDS: FLASH POINT IS LESS THAN 20°F. EXTREMELY FLAMMABLE LIQUID AND VAPOR! Water spray may be ineffective. Closed containers may explode when exposed to extreme heat due to buildup of steam. Closed containers may explode when exposed to extreme heat. Vapors may form explosive mixtures with air. Vapors can travel to a source of ignition and flash back. Isolate from heat, electrical equipment, sparks and open flame. Perforation of the pressurized container may cause bursting of the can. No unusual fire or explosion hazards noted. Keep containers tightly closed.

SPECIAL FIREFIGHTING PROCEDURES: Full protective equipment including self-contained breathing apparatus should be used. Evacuate area and fight fire from a safe distance. Water may be used to cool closed containers to prevent pressure buildup and possible autoignition or explosion. Use water spray to keep fire-exposed containers cool. Containers may explode when heated.

Special Fire and Explosion Hazard (Combustible Dust): No Information

6. Accidental Release Measures

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Remove all sources of ignition, ventilate area and remove with inert absorbent and non-sparking tools. Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers. Ventilate area, isolate spilled material, and remove with inert absorbent. Dispose of contaminated absorbent, container, and unused contents in accordance with local, state, and federal regulations.

7. Handling and Storage

HANDLING: Wash thoroughly after handling. Wash hands before eating. Remove contaminated clothing and launder before reuse. Use only with adequate ventilation. Follow all SDS and label precautions even after container is emptied because it may retain product residues. Avoid breathing fumes, vapors, or mist. Avoid contact with eyes, skin and clothing.

STORAGE: Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Contents under pressure. Do not store above 120 ° F. Store large quantities in buildings designed and protected for storage of flammable aerosols. Product should be stored in tightly sealed containers and protected from heat, moisture, and foreign materials. Store in a dry, well ventilated place. Keep container tightly closed when not in use. Keep away from heat, sparks, flame and sources of ignition. Avoid excess heat.

Advice on Safe Handling of Combustible Dust: No Information

8. Exposure Controls / Personal Protection

Chemical Name	CAS-No.	Weight % Less Than	ACGIH TLV- TWA	ACGIH TLV- STEL	OSHA PEL-TWA	OSHA PEL- CEILING
Propane	74-98-6	20.0	N.E.	N.E.	1000 ppm	N.E.
n-Butane	106-97-8	10.0	N.E.	1000 ppm	N.E.	N.E.
Naphtha, Petroleum, Hydrotreated Light	64742-49-0	10.0	N.E.	N.E.	N.E.	N.E.
Hydrotreated Light Distillate	64742-47-8	10.0	N.E.	N.E.	N.E.	N.E.
Xylenes (o-, m-, p- isomers)	1330-20-7	5.0	100 ppm	150 ppm	100 ppm	N.E.
Ethylbenzene	100-41-4	5.0	20 ppm	N.E.	100 ppm	N.E.
Stoddard Solvent	8052-41-3	1.0	100 ppm	N.E.	500 ppm	N.E.
Pigment Orange 13	3520-72-7	1.0	N.E.	N.E.	N.E.	N.E.
Crystalline Silica / Quartz	14808-60-7	1.0	0.025 mg/m3	N.E.	50 µg/m3	N.E.

PERSONAL PROTECTION

ENGINEERING CONTROLS: Use explosion-proof ventilation equipment. Provide general dilution of local exhaust ventilation in volume and pattern to keep TLV of hazardous ingredients below acceptable limits. Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

RESPIRATORY PROTECTION: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. A NIOSH/MSHA approved air purifying respirator with organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.

SKIN PROTECTION: Use gloves to prevent prolonged skin contact. Nitrile or Neoprene gloves may afford adequate skin protection.

EYE PROTECTION: Use safety eyewear designed to protect against splash of liquids.

OTHER PROTECTIVE EQUIPMENT: Refer to safety supervisor or industrial hygienist for further guidance regarding types of personal protective equipment and their applications.

HYGIENIC PRACTICES: Wash thoroughly with soap and water before eating, drinking or smoking. Remove contaminated clothing immediately and launder before reuse.

Engineering Measures for Combustible Dust: No Information

9. Physical and Chemical Properties

Appearance:	Aerosolized Mist	Physical State:	Liquid
Odor:	Solvent Like	Odor Threshold:	N.E.
Relative Density:	0.844	pH:	N.D.
Freeze Point, °C:	N.D.	Viscosity:	N.D.
Solubility in Water:	Miscible	Partition Coefficient, n-octanol/water:	N.D.
Decomposition Temp., °C:	N.D.	Explosive Limits, vol%:	0.9 - 12.6
Boiling Range, °C:	-37 - 537	Flash Point, °C:	-104
Flammability:	Supports Combustion	Auto-ignition Temp., °C:	N.D.
Evaporation Rate:	Faster than Ether	Vapor Pressure:	N.D.
Vapor Density:	Heavier than Air		

(See "Other information" Section for abbreviation legend)

10. Stability and Reactivity

CONDITIONS TO AVOID: Avoid temperatures above 120°F (49°C). Avoid all possible sources of ignition.

INCOMPATIBILITY: Incompatible with strong oxidizing agents, strong acids and strong alkalies.

HAZARDOUS DECOMPOSITION: By open flame, carbon monoxide and carbon dioxide. When heated to decomposition, it emits acrid smoke and irritating fumes. Contains solvents which may form carbon monoxide, carbon dioxide, and formaldehyde.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: This product is stable under normal storage conditions.

11. Toxicological Information

EFFECTS OF OVEREXPOSURE - EYE CONTACT: Causes Serious Eye Irritation

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: May cause skin irritation. Allergic reactions are possible.

EFFECTS OF OVEREXPOSURE - INHALATION: High gas, vapor, mist or dust concentrations may be harmful if inhaled. High vapor concentrations are irritating to the eyes, nose, throat and lungs. Harmful if inhaled. Avoid breathing fumes, spray, vapors, or mist. Prolonged or excessive inhalation may cause respiratory tract irritation.

EFFECTS OF OVEREXPOSURE - INGESTION: Harmful if swallowed.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: Overexposure to xylene in laboratory animals has been associated with liver abnormalities, kidney, lung, spleen, eye and blood damage as well as reproductive disorders. Effects in humans, due to chronic overexposure, have included liver, cardiac abnormalities and nervous system damage. IARC lists Ethylbenzene as a possible human carcinogen (group 2B). Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion, and blurred vision) and/or damage. High concentrations may lead to central nervous system effects (drowsiness, dizziness, nausea, headaches, paralysis, and blurred vision) and/or damage.

PRIMARY ROUTE(S) OF ENTRY: Eye Contact, Ingestion, Inhalation, Skin Absorption, Skin Contact

ACUTE TOXICITY VALUES

The acute effects of this product have not been tested. Data on individual components are tabulated below:

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Vapor LC50</u>
106-97-8	n-Butane	N.E.	N.E.	658 mg/L Rat
64742-49-0	Naphtha, Petroleum, Hydrotreated Light	>5000 mg/kg Rat	>3160 mg/kg Rabbit	>4951 mg/L Rat
64742-47-8	Hydrotreated Light Distillate	>5000 mg/kg Rat	>2000 mg/kg Rabbit	>5000 mg/L Rat
1330-20-7	Xylenes (o-, m-, p- isomers)	3500 mg/kg Rat	>4350 mg/kg Rabbit	29.08 mg/L Rat
100-41-4	Ethylbenzene	3500 mg/kg Rat	15400 mg/kg Rabbit	17.4 mg/L Rat
3520-72-7	Pigment Orange 13	>5000 mg/kg Rat	N.E.	N.E.
14808-60-7	Crystalline Silica / Quartz	5500 mg/kg Rat	5500	100 mg/L

N.E. - Not Established

12. Ecological Information

ECOLOGICAL INFORMATION: Product is a mixture of listed components.

13. Disposal Information

DISPOSAL INFORMATION: Do not incinerate closed containers. This product as supplied is a USEPA defined ignitable hazardous waste. Dispose of unusable product as a hazardous waste (D001) in accordance with local, state, and federal regulation.

14. Transport Information

	<u>Domestic (USDOT)</u>	<u>International (IMDG)</u>	<u>Air (IATA)</u>	<u>TDG (Canada)</u>
UN Number:	N.A.	1950	1950	N.A.
Proper Shipping Name:	Paint Products in Limited Quantities	Aerosols	Aerosols	Paint Products in Limited Quantities
Hazard Class:	N.A.	2.1	2.1	N.A.
Packing Group:	N.A.	N.A.	N.A.	N.A.
Limited Quantity:	Yes	Yes	Yes	Yes

15. Regulatory Information

U.S. Federal Regulations:

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Gas under pressure, Carcinogenicity, Specific target organ toxicity (single or repeated exposure)

Sara Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

<u>Chemical Name</u>	<u>CAS-No.</u>
Xylenes (o-, m-, p- isomers)	1330-20-7
Ethylbenzene	100-41-4

Toxic Substances Control Act:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(b) if exported from the United States:

<u>Chemical Name</u>	<u>CAS-No.</u>
----------------------	----------------

Castor oil, sulfated, sodium salt

68187-76-8

16. Other Information**HMIS RATINGS****Health:** 2* **Flammability:** 4 **Physical Hazard:** 0 **Personal Protection:** X**NFPA RATINGS****Health:** 2 **Flammability:** 4 **Instability:** 0**Volatile Organic Compounds** 549 g/L**SDS REVISION DATE:** 8/7/2018

REASON FOR REVISION: Substance Regulatory CAS Number Changed
Substance Hazardous Flag Changed
Substance Hazard Threshold % Changed
Substance Chemical Name Changed
Substance and/or Product Properties Changed in Section(s):
02 - Hazard Identification
03 - Composition/Information on Ingredients
15 - Regulatory Information
16 - Other Information
Revision Statement(s) Changed

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

The manufacturer believes, to the best of its knowledge, information and belief, the information contained herein to be accurate and reliable as of the date of this safety data sheet. However, because the conditions of handling, use, and storage of these materials are beyond our control, we assume no responsibility or liability for personal injury or property damage incurred by the use of these materials. The manufacturer makes no warranty, expressed or implied, regarding the accuracy or reliability of the data or results obtained from their use. All materials may present unknown hazards and should be used with caution. The information and recommendations in this material safety data sheet are offered for the users' consideration and examination. It is the responsibility of the user to determine the final suitability of this information and to comply with all applicable international, federal, state, and local laws and regulations.

Issuing Date: 1-Jun-2008

Revision Date: 7-Jun-2015

SDS Number: 9164

1. Identification of the Substance / Preparation and of the Company / Undertaking

Product identifier

Product Name UG Uni-proof RV & Marine -50 °F Burst Antifreeze
Stock Numbers 132701 / 132705

Other means of identification

Synonyms Not available.

Recommended use of the chemical and restrictions on use

Recommended Use RV & Marine Antifreeze.

Uses advised against Not available.

Details of the supplier of the safety data sheet

Supplier Name South/Win, Ltd.
Supplier Address 112 Maxfield Rd.
Greensboro, NC 27405 US
Supplier Phone Number Phone: (800) 648-4393
Fax: (336) 398-5680
Emergency Phone: CHEMTREC: (800) 424-9300

2. Hazards Identification

GHS INFORMATION

Classification: Flammable Liquids, Category 3
Eye Irritation, Category 2A

Signal Word

Hazard Statement:

Flammable liquid and vapor.
Causes serious eye irritation

Warning



Appearance Red

Physical State Liquid

Odor Almost Odorless



Safety Data Sheet

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Precautionary Statements

- Prevention:** Keep away from heat, sparks, open flames, and hot surfaces. – No smoking. Keep container tightly closed.
Ground and bond container and receiving equipment.
Use explosion-proof electrical, ventilating, and lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Wash thoroughly after handling.
Wear protective gloves, protective clothing and eye protection.
- Response:** If on skin (or hair): Take off immediately all contaminated clothing.
Rinse skin with water/shower.
If in eyes; Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.
In case of fire: Use dry chemical, CO₂, water spray or alcohol-resistant foam to extinguish.
- Storage:** Store in a well-ventilated place. Keep cool.
- Disposal:** Dispose of contents/container in accordance with applicable regional, national, and local laws and regulations.

Hazards Not Otherwise Classified: Not applicable.

Ingredients with Unknown Toxicity: None.

This material is considered hazardous by the OSHA Hazard Communication Standard, (29 CFR 1910.1200).

This material is considered hazardous by the Hazardous Products Regulations, 2015.



Safety Data Sheet

Issuing Date: 1-Jun-2008

Revision Date: 7-Jun-2015

SDS Number: 9164

3. Composition / Information on Ingredients

Ingredient(s)	Common name / Synonyms	CAS No.	% wt./wt.
Water	Not available.	7732-18-5	70 - 80
Ethanol	Not available.	64-17-5	10 - 20
1,2-Propanediol	Propylene glycol	57-55-6	3 - 5
Phosphoric acid, potassium salt (1:2)	Potassium phosphate, dibasic	7758-11-4	< 1

4. First-Aid Measures

- Inhalation:** If inhaled: Call a poison center or doctor if you feel unwell.
Acute and delayed symptoms and effects: May cause respiratory irritation. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. Excessive inhalation may cause headache, dizziness, and confusion, loss of appetite and/or loss of consciousness.
- Eye Contact:** If in eyes: Rinse cautiously with water for at least 20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Acute and delayed symptoms and effects: Causes serious eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision. Ethanol may cause painful sensitization to light, chemical conjunctivitis and corneal damage.
- Skin Contact:** If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a poison center or doctor if you feel unwell.
Acute and delayed symptoms and effects: May cause skin irritation. Signs/symptoms may include localized redness, swelling, and itching.
- Ingestion:** If swallowed: Call a poison center or doctor if you feel unwell. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.
Acute and delayed symptoms and effects: May cause gastrointestinal irritation. Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.
- General Advice:** In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible)
- Note to Physician:** Symptoms may not appear immediately.



Issuing Date: 1-Jun-2008

Revision Date: 7-Jun-2015

SDS Number: 9164

5. Fire-fighting Measures

FLAMMABILITY AND EXPLOSION INFORMATION

Flammable liquid and vapor. Will be easily ignited by heat, sparks, or flames. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapor explosion hazard indoors, outdoors, or in sewers. Runoff to sewer may create fire or explosion hazard. Containers may explode when heated. Liquid is lighter than water.

If tank, railcar or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

Fire involving Tanks or Car/Trailer Loads: Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Cool containers with flooding quantities of water until well after fire is out. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. ALWAYS stay away from tanks engulfed in fire. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

Sensitivity to Mechanical Impact: This material is not sensitive to mechanical impact.
Sensitivity to Static Discharge: Take precautionary measures against static discharge. This material is sensitive to static discharge.

MEANS OF EXTINCTION

Suitable Extinguishing Media: Small Fire: Dry chemical, CO₂, water spray or alcohol-resistant foam.
Large Fire: Water spray, fog or alcohol-resistant foam. Move containers from fire area if you can do it without risk.

Unsuitable Extinguishing Media: Do not use straight streams.

Products of Combustion: Oxides of carbon. Oxides of phosphorus. Potassium oxide.

Protection of Firefighters: Fire may produce irritating, corrosive and/or toxic gases. Vapors may cause dizziness or suffocation. Runoff from fire control may cause pollution. Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection.

6. Accidental Release Measures

Emergency Procedures: As an immediate precautionary measure, isolate spill or leak area. Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Ventilate closed spaces before entering. ELIMINATE all ignition sources (no smoking, flares, sparks, or flames in immediate area). All equipment used when handling the product must be grounded.



Safety Data Sheet

Issuing Date: 1-Jun-2008

Revision Date: 7-Jun-2015

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Personal Precautions:	Do not touch or walk through spilled material. Use personal protection recommended in Section 8.
Environmental Precautions:	Prevent entry into waterways, sewers, basements or confined areas.
Methods for Containment:	Stop leak if you can do it without risk. A vapor suppressing foam may be used to reduce vapors.
Methods for Clean-Up:	Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Use clean non-sparking tools to collect absorbed material.
Other Information:	See Section 13 for disposal considerations.

7. Handling and Storage

Handling:

Do not swallow. Avoid breathing mist, vapours, or spray. Avoid contact with eyes, skin, or clothing. Keep away from heat, sparks, open flames, and hot surfaces. – No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wash thoroughly after handling. See Section 8 for information on Personal Protective Equipment.

Storage:

Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store away from incompatible materials. See Section 10 for information on Incompatible Materials. Do not store in unlabeled containers and use appropriate containment to avoid environmental contamination. Keep out of the reach of children.

8. Exposure Controls / Personal Protection

Exposure Guidelines Component

Water [CAS No. 7732-18-5]

ACGIH: No TLV established.

OSHA: No PEL established.

Ethanol [CAS No. 64-17-5]

ACGIH: 1000 ppm (TWA); A3 (2008)

OSHA: 1000 ppm (TWA), 1900 mg/m³ (TWA);

Propylene glycol [CAS No. 57-55-6]

ACGIH: No TLV established.

OSHA: No PEL established.

Potassium phosphate, dibasic [CAS No. 7758-11-4]

ACGIH: No TLV established.

OSHA: No PEL established.

Issuing Date: 1-Jun-2008

Revision Date: 7-Jun-2015

SDS Number: 9164

PEL: Permissible Exposure Limit

TLV: Threshold Limit Value

TWA: Time-Weighted Average

Engineering Controls:

Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapour, gas, etc.) below recommended exposure limits. Use explosion-proof electrical, ventilating, and lighting equipment.

PERSONAL PROTECTIVE EQUIPMENT (PPE)



Eye/Face Protection:

Wear safety glasses with side shields or chemical goggles. Ensure that eyewash stations are close to the workstation location. Use equipment for eye protection that meets the standards referenced by CSA Standard CAN/CSA-Z94.3-92 and OSHA regulations in 29 CFR 1910.133 for Personal Protective Equipment.

Hand Protection:

Wear protective gloves. Nitrile rubber gloves are recommended. Consult manufacturer specifications for further information.

Skin and Body Protection:

Wear protective clothing. Flame resistant clothing that meets the NFPA 2112 and CAN/CGSB 155.20 standards is recommended in areas where material is stored or handled.

Respiratory Protection:

If engineering controls and ventilation are not sufficient to control exposure to below the allowable limits then an appropriate NIOSH/MSHA approved air-purifying respirator that meets the requirements of CSA Standard CAN/CSA- Z94.4-11, with organic vapor cartridge, or self-contained breathing apparatus must be used. Supplied air breathing apparatus must be used when oxygen concentrations are low or if airborne concentrations exceed the limits of the air- purifying respirators.

General Hygiene Considerations:

Handle according to established industrial hygiene and safety practices. Consult a competent industrial hygienist to determine hazard potential and/or the PPE manufacturers to ensure adequate protection.



Safety Data Sheet

Issuing Date: 1-Jun-2008

Revision Date: 7-Jun-2015

SDS Number: 9164

9. Physical and Chemical Properties

Appearance:	Clear, red liquid.
Colour:	Red.
Odour:	Almost odourless.
Odour Threshold:	Not available.
Physical State:	Liquid.
pH:	Not available.
Melting Point / Freezing Point:	Not available.
Initial Boiling Point:	85 °C (185 °F)
Boiling Range:	85 to 93.3 °C (185 to 200 °F)
Flash Point:	43 °C (109.4 °F) (TCC)
Evaporation Rate:	Not available.
Flammability (solid, gas):	Not applicable.
Lower Flammability Limit:	3.3 % (Ethanol)
Upper Flammability Limit:	19 % (Ethanol)
Vapor Pressure:	Not available.
Vapor Density:	Not available.
Relative Density:	0.97 (Water = 1) at 21.1 °C (70 °F)
Solubilities:	Soluble in water.
Partition Coefficient: n-Octanol/Water:	Not available.
Auto-ignition Temperature:	363 °C (685.4 °F) (Ethanol)
Decomposition Temperature:	Not available.
Viscosity:	Not available.
Percent Volatile, wt. %:	Not available.
VOC content, wt. %:	Not available.
Density:	8.05 lb/gal
Coefficient of Water/Oil Distribution:	Not available.



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10. Stability and Reactivity

Reactivity:	Contact with incompatible materials. Sources of ignition. Exposure to heat.
Chemical Stability:	Stable under normal storage conditions.
Possibility of Hazardous Reactions:	None known.
Conditions to Avoid:	Contact with incompatible materials. Sources of ignition. Exposure to
Incompatible Materials:	Strong acids. Strong bases. Oxidizers.
Hazardous Decomposition Products:	Not available.

11. Toxicological Information

EFFECTS OF ACUTE EXPOSURE

Product Toxicity

Oral:	Not available.
Dermal:	Not available.
Inhalation:	Not available.

Component Toxicity

Component	CAS No.	LD50 oral	LD50 dermal	LC50
Water	7732-18-5	> 90 mL/kg (rat)	Not available.	Not available.
Ethanol	64-17-5	7060 mg/kg (rat)	20000 mg/kg (rabbit)	20000 ppm (rat); 10H
Propylene glycol	57-55-6	20000 mg/kg (rat)	20800 mg/kg (rabbit)	Not available.
Potassium phosphate, dibasic	7758-11-4	Not available.	Not available.	Not available.

Likely Routes of Exposure: Eye contact. Skin contact. Inhalation. Ingestion.

Target Organs: Skin. Eyes. Gastrointestinal tract. Respiratory system. Blood. Central nervous system.

Symptoms (including delayed and immediate effects)

Inhalation: May cause respiratory irritation. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. Excessive inhalation may cause headache, dizziness, and confusion, loss of appetite and/or loss of consciousness.



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Eye: Causes serious eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision. Ethanol may cause painful sensitization to light, chemical conjunctivitis and corneal damage.

Skin: May cause skin irritation. Signs/symptoms may include localized redness, swelling, and itching.

Ingestion: May cause gastrointestinal irritation. Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

Skin Sensitization: Not available.

Respiratory Sensitization: Not available.

Medical Conditions Aggravated By Exposure: Not available.

EFFECTS OF CHRONIC EXPOSURE (from short and long-term exposure)

Target Organs: Skin. Eyes. Gastrointestinal tract. Respiratory system. Blood. Cardiovascular system. Liver. Kidneys. Reproductive system. Central nervous system.

Chronic Effects: Prolonged or repeated contact may dry skin and cause irritation. Prolonged exposure to Ethanol may cause liver, kidney, and heart damage.

Carcinogenicity: Product is not classified as a carcinogen. See Component Carcinogenicity table below for information on individual components. Animal studies with Ethanol have reported the development of tumours.

Component Carcinogenicity

Component	ACGIH	IARC	NTP	OSHA	Prop 65
Ethanol	A3	Not listed.	Not listed.	Not listed.	Not listed.

Mutagenicity: Laboratory experiments with Ethanol have resulted in mutagenic effects.

Reproductive Effects: Ethanol may cause reproductive effects.

Developmental Effects

Teratogenicity: Not available.

Embryotoxicity: Ethanol has been shown to produce fetotoxicity in the embryo or fetus of laboratory animals. Prenatal exposure to ethanol is associated with a distinct pattern of congenital malformations that have collectively been termed the "fetal alcohol syndrome".

Toxicologically Synergistic Materials: Not available.



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12. Ecological Information

Ecotoxicity:	Not available.
Persistence / Degradability:	Not available.
Bioaccumulation / Accumulation:	Not available.
Mobility in Environment:	Not available.
Other Adverse Effects:	Not available.

13. Disposal Considerations

Disposal Instructions: Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

14. Transport information

U.S. Department of Transportation (DOT)

Exempted under DOT CFR49 173.150(e). Product conforms to the water alcohol exemption.

This product is exempted under the "Limited Quantity Regulation" when packed in containers of one gallon or less.

Canada Transportation of Dangerous Goods (TDG)

Proper Shipping Name: UN1987, ALCOHOLS, N.O.S. (Ethanol), 3, PG III

Class: 3

UN Number: UN1987

Packing Group: III

Label Code:





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15. Regulatory information

Chemical Inventories US

(TSCA)

The components of this product are in compliance with the chemical notification requirements of TSCA.

Canada (DSL)

The components of this product are in compliance with the chemical notification requirements of the NSN Regulations under CEPA, 1999.

Federal Regulations

United States

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SARA Title III

No components are listed.

State Regulations

Massachusetts

US Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000)

Component	CAS No.	RTK List
Ethanol	64-17-5	Listed.

New Jersey

US New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5)

Component	CAS No.	RTK List
Ethanol	64-17-5	SHHS
Propylene glycol	57-55-6	Listed.

Pennsylvania

US Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323)

Component	CAS No.	RTK List
Ethanol	64-17-5	Listed.
Propylene glycol	57-55-6	Listed.

California

California Prop 65: This product does not contain chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.



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16. Other information

Prepared By: Randy Boitz

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

MATERIAL SAFETY DATA SHEET	
SAFE ENCASEMENT SYSTEMS 8689 W. Sahara Ave., Suite 160 Las Vegas, NV 89117-5871 Revised: January 2006 Information. Phone: (888) 277-8834	For fires with this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus, to protect against the hazardous effects of normal products of combustion.
	SECTION V - REACTIVITY DATA
	Stable. <i>Keep from freezing.</i>
	None reasonably foreseeable. Will not occur Will not occur.
SECTION I - PRODUCT ID.	
PRODUCT NUMBER: SE-120 PRODUCT NAME: Protective-Skin PRODUCT CLASS: Acrylic Elastomeric Coating.	
SECTION II - HAZARDOUS INGREDIENTS	
None known at a hazardous level. HMIS Hazard Rating = 0 0 0 J This product contains no heavy metals or fibers.	
SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS	
Milky white liquid 100°C (212°F) 1.3 – 1.5 (H ₂ O = 1.0) (mm Hg @ 20°C) = 18 lighter than 1.0 less than 1.0 40%	INHALATION of excessive vapor/mist can cause headache, nausea and irritation of the nose, throat and lungs. EYE CONTACT: slightly irritating to eyes. SKIN EXPOSURE: irritating to skin upon Prolonged or repeated contact. For inhalation, move subject to fresh air. For eye contact, flush with large amounts of water for at least 15 minutes. See a physician if irritation persists. Wash effected skin area with soap and water. If swallowed, dilute by giving 2 glasses of water to drink and CALL A PHYSICIAN IMMEDIATELY. Never give anything by mouth to an unconscious subject.
SECTION IV - FIRE & EXPLOSION HAZARD DATA	
- NOT REGULATED. - N/A - N/A N/A Material can splatter above 212°F. Polymer film can burn.	DO NOT TAKE INTERNALLY. KEEP AWAY FROM CHILDREN.
	SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE.
	Keep Spectators away. WEAR SKIN, EYE, AND RESPIRATORY PROTECTION DURING CLEANUP. Dike and contain with inert absorbent materials (sand, earth, etc.). Transfer to containers for recovery or disposal.
	Floors may be slippery, use care to avoid falls. Flush final traces with water. Keep spills and cleaning run-off materials out of municipal sewers or open bodies of water. Disposal should be in accordance with Federal, state and local regulations for water-based coatings. Coagulate the emulsion by the stepwise addition of ferric chloride and lime. Incinerate the solids and contaminated diking material at a permitted facility, according to Federal, State and local regulations. <i>KEEP FROM FREEZING.</i>
	SECTION VIII - CONTROL MEASURES.
	GENERAL VENTILATION IS RECOMMENDED DURING NORMAL USE. LOCAL VENTILATION MAY BE REQUIRED DURING CERTAIN OPERATIONS TO PREVENT INHALATION OF VAPORS. Wear respirator (MSHA or NIOSH APPROVED or the equivalent) ORGANIC VAPOR/PARTICULATE RESPIRATOR. IN CASE OF POOR VENTILATION (or exposure to spray mist), USE NIOSH APPROVED ORGANIC VAPOR MASK. IMPERVIOUS GLOVES FOR PROLONGED OR REPEATED CONTACT. CHEMICAL SPLASH GOGGLES (ANSI 2-87.1) or EQUIVALENT. UNHINDERED ACCESS TO SAFETY SHOWER AND EYE WASH STATIONS. AS A GENERAL HYGIENIC PRACTICE, WASH HANDS AND FACE AFTER USE. Showers and cleaning of clothes are recommended. Use approved clothing when working around ACM or lead-based paints.
	SECTION IX - REGULATORY INFO.
	Not Regulated. Follow all applicable OSHA and EPA regulations concerning normal latex spraying activities.

MATERIAL SAFETY DATA SHEET	
MFG. BY: SAFE ENCASEMENT SYSTEMS EMERGENCY CONTACT: (800) 424-9300 ADDRESS: 8689 West Sahara, Suite 160 Las Vegas, NV 89117 Revised: MAY.08 Information. Phone: (888) 277-8834	SPECIAL FIRE FIGHTING PROCEDURES: For fires with this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus, to protect against the hazardous effects of normal products of combustion.
SECTION I - PRODUCT ID. PRODUCT NUMBER: SE-110-MS PRODUCT NAME: Multi-Surface Primer with Corrosion and Mold Growth Inhibitors. PRODUCT CLASS: Specialty Acrylic Primer Coating	SECTION V - REACTIVITY DATA STABILITY: Stable (slight ammonia odor). CONDITIONS TO AVOID: <i>Keep from freezing.</i> INCOMPATIBILITY (MATERIALS TO AVOID): None reasonably foreseeable. Hazardous Polymerization: Will not occur HAZARDOUS DECOMPOSITION OR BY PRODUCTS: Will not occur.
SECTION II - HAZARDOUS INGREDIENTS None known at a hazardous level (slight ammonia odor, contains less than Windex Glass Cleaner). HMIS Hazard Ratings = 0 0 0 J This product contains no heavy metals or fibers.	SECTION VI - HEALTH HAZARD DATA EFFECTS OF OVEREXPOSURE: INHALATION: inhaled mist can cause head aches, nausea or irritation of the nose, throat and lungs. EYE CONTACT: slightly irritating to eyes. SKIN EXPOSURE: irritating to skin upon prolonged or repeated contact. EMERGENCY AND FIRST AID PROCEDURES: For inhalation, move subject to fresh air. For eye contact, flush with large amounts of water for at least 15 minutes. See a physician if irritation persists. Wash effected skin area with soap and water. If swallowed, dilute by giving 2 glasses of water to drink and CALL A PHYSICIAN IMMEDIATELY. Never give anything by mouth to an unconscious subject. OTHER PRECAUTIONS: DO NOT TAKE INTERNALLY. KEEP AWAY FROM CHILDREN.
SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS APPEARANCE: Milky white liquid (dries clear) BOILING POINT: 100°C (212°F) Specific Gravity: Greater than 1.0 (H ₂ O = 1.0) VAPOR PRESSURE: (mm Hg @ 20°C) = 18 VAPOR DENSITY: lighter than 1.0 EVAPORATIVE RATE: equal to water PERCENT VOLATILE (by volume) = 50 - 55%	SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Keep Spectators away. wear skin, eye and Respiratory Protection during cleanup. Dike and contain with inert absorbent materials (sand, earth, etc.). Transfer to containers for recovery or disposal.
SECTION IV - FIRE & EXPLOSION HAZARD DATA FLAMMABILITY CLASSIFICATION: DOT - NOT REGULATED. FLASH POINT - N/A LEL - N/A EXTINGUISHING MEDIA: N/A UNUSUAL FIRE & EXPLOSION HAZARDS: Material can splatter above 212°F. Polymer film can burn.	Floors may be slippery, use care to avoid falls. Flush final traces with water. Keep spills and cleaning run-off materials out of municipal sewers or open bodies of water. WASTE DISPOSAL METHOD: Disposal should be in accordance with Federal, state and local regulations for water-based coatings. Coagulate the emulsion by the stepwise addition of ferric chloride and lime. Incinerate the solids and contaminated diking material at a permitted facility, according to Federal, State and local regulations. PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: KEEP FROM FREEZING.
	SECTION VIII - CONTROL MEASURES. VENTILATION: GENERAL VENTILATION IS RECOMMENDED DURING NORMAL USE. LOCAL VENTILATION MAY BE REQUIRED DURING CERTAIN OPERATIONS TO PREVENT INHALATION OF VAPORS. RESPIRATORY PROTECTION: Wear respirator (MSHA or NIOSH Approved or equal) ORGANIC VAPOR/PARTICULATE RESPIRATOR. in case of poor ventilation or exposure to spray mist, use NIOSH APPROVED Organic Vapor Mask. PROTECTIVE GLOVES: IMPERVIOUS GLOVES FOR PROLONGED OR REPEATED CONTACT. EYE PROTECTION: CHEMICAL SPLASH GOGGLES (ANSI 2-87.1) or EQUIVALENT. OTHER PROTECTIVE EQUIPMENT AND MEASURES: UNHINDERED ACCESS TO SAFETY SHOWER AND EYE WASH STATIONS. AS A GENERAL HYGIENIC PRACTICE, WASH HANDS AND FACE AFTER USE. Showers and cleaning of clothes are recommended. Use approved clothing when working around asbestos or lead.
	SECTION IX - REGULATORY INFO. DOT PROPER SHIPPING NAME: Not Regulated. Follow all applicable OSHA and EPA regulations concerning normal latex spraying activities.

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REVISION DATE: 03-07-2017

SUPERSEDES: 11-04-2016

SECTION 1: IDENTIFICATION OF THE PRODUCT AND SUPPLIER**PRODUCT INFORMATION**

PRODUCT: CHILDERS CP-11-1
PRODUCT DESCRIPTION: Coating
INTENDED USE: Coating
PRODUCT IDENTIFIER: 801801PM

COMPANY INFORMATION

H.B. Fuller Construction Products Inc.
1105 S. Frontenac Street
Aurora, IL 60504
Phone: 1-800-552-6225

Medical Emergency Phone Number (24 Hours): 1-888-853-1758
Transport Emergency Phone Number (CHEMTREC): 1-800-424-9300

SECTION 2: HAZARDS IDENTIFICATION

GHS Classification: This product is not classified as hazardous under GHS criteria.
GHS Precautions:
Safety Precautions: No special precautionary measures are required. Please read the entire Safety Data Sheet for other information regarding handling of this product.
First Aid Measures: IF SWALLOWED: Do not induce vomiting. Seek medical attention if symptoms develop. IF IN EYES: Use an eye wash to remove chemical from the eye. IF ON SKIN: Wash with soap and water. IF INHALED: Remove individual to fresh air after an airborne exposure if any symptoms develop.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS #	PERCENT	Classification	Note
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*This product contains one or more materials that may be hazardous when present as an airborne dust. During normal handling of the product, the material is encapsulated within the product and will not present an exposure risk. Once the product has reached its final state and is abraded or disturbed, dusting and exposure may occur. This product contains titanium dioxide, which is hazardous when present as an airborne dust. As provided, and during normal use of this product, this substance is encapsulated within the product. As such, it is considered to be inextricably bound, and not readily available for exposure. This product contains crystalline silica. As provided, and during normal use of this product, the crystalline silica is encapsulated within the product. As such, it is considered to be inextricably bound, and not readily available for exposure. Use of this product would not subject the user to the compliance requirements of 29CFR1910.1053 or 1926.1153.

Unlisted ingredients are not 'hazardous' per the Occupational Safety and Health Administration Hazard Communication Standard (29 CFR 1910.1200) and/or are not found on the Canadian Workplace Hazardous Materials Information System ingredient disclosure list. See Section 8 for exposure limit guidelines.

SECTION 4: FIRST AID MEASURES

IF IN EYES: Use an eye wash to remove a chemical from your eye regardless of the level of hazard. Flush the affected eye for at least twenty minutes. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Seek medical advice after flushing.

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IF ON SKIN: Wash with soap and water. Get medical attention if irritation develops or persists.

IF INHALED: Remove to fresh air. Call a physician if symptoms persist.

IF SWALLOWED: Do not induce vomiting. Seek medical attention if symptoms develop. Provide medical care provider with this MSDS. Induced vomiting may lead to aspiration of the material into the lungs potentially causing chemical pneumonitis that may be fatal.

SECTION 5: FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Use water spray, foam, dry chemical or carbon dioxide.

UNUSUAL FIRE AND EXPLOSION HAZARDS: There is a possibility of pressure buildup in closed containers when heated. Water spray may be used to cool the containers.

SPECIAL FIRE FIGHTING INSTRUCTIONS: Persons exposed to products of combustion should wear self-contained breathing apparatus and full protective equipment.

HAZARDOUS COMBUSTION PRODUCTS: Carbon dioxide, Carbon monoxide

SECTION 6: ACCIDENTAL RELEASE MEASURES

SPECIAL PROTECTION: No adverse health effects expected from the clean-up of spilled material. Follow personal protective equipment recommendations found in Section 8 of this SDS.

METHODS FOR CLEAN-UP: Dike if necessary, contain spill with inert absorbent and transfer to containers for disposal. Keep spilled product out of sewers, watersheds, or water systems.

Transport Emergency Phone Number (CHEMTREC): 1-800-424-9300

SECTION 7: HANDLING AND STORAGE

Handling: No special handling instructions due to toxicity.

Storage: Store in a cool, dry place. Protect from freezing.
Consult the Technical Data Sheet for specific storage instructions.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMITS:

Chemical Name	Note	ACGIH EXPOSURE LIMITS	OSHA PEL
Calcium carbonate	* (see below)	No data available.	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)
Titanium dioxide	* (see below)	10 mg/m ³ TWA	15 mg/m ³ TWA (total dust)
Cellulose	* (see below)	10 mg/m ³ TWA	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)
Crystalline silica	* (see below)	0.025 mg/m ³ TWA (respirable fraction)	((250)/(%SiO ₂ + 5) mppcf TWA (respirable)); ((10)/(%SiO ₂ + 2) mg/m ³ TWA (respirable)); ((30)/(%SiO ₂ + 2) mg/m ³ TWA (total dust))

*This product contains one or more materials that may be hazardous when present as an airborne dust. During normal handling of the product, the material is encapsulated within the product and will not present an exposure risk. Once the product has reached its final state and is abraded or disturbed, dusting and exposure may occur. This product contains titanium dioxide, which is hazardous when present as an airborne dust. As

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provided, and during normal use of this product, this substance is encapsulated within the product. As such, it is considered to be inextricably bound, and not readily available for exposure. This product contains crystalline silica. As provided, and during normal use of this product, the crystalline silica is encapsulated within the product. As such, it is considered to be inextricably bound, and not readily available for exposure. Use of this product would not subject the user to the compliance requirements of 29CFR1910.1053 or 1926.1153.

ENGINEERING CONTROL METHODS:

VENTILATION:	General room ventilation might be required under normal conditions of use.
EYE PROTECTION:	Wear safety glasses when handling this product.
SKIN PROTECTION:	Not normally required. Wear chemically resistant gloves to prevent prolonged or repeated contact.
GLOVES:	Not normally required. Use nitrile gloves if conditions warrant.
RESPIRATORY PROTECTION:	No respiratory protection required under normal conditions of use. Respirators should be selected by and used following requirements found in OSHA's respirator standard (29 CFR 1910.134).

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:	Liquid
COLOR:	Gray
ODOR:	Sweet
ODOR THRESHOLD:	Not established
pH:	Not established
FREEZING/MELTING POINT (deg. C):	Not established
BOILING POINT (deg. C):	Not established
FLASH POINT:	Non flammable
EVAPORATION RATE:	Not established
FLAMMABILITY:	Not a flammable solid or gas
UPPER EXPLOSIVE LIMIT (% in air):	Not established
LOWER EXPLOSIVE LIMIT (% in air):	Not established
VAPOR PRESSURE (mm Hg):	Not established
VAPOR DENSITY:	Not established
WEIGHT PER GALLON (lbs.):	11.30
SPECIFIC GRAVITY:	1.330
SOLUBILITY:	Not established
OCTANOL/WATER COEFFICIENT:	Not established
AUTOIGNITION TEMPERATURE:	Not established
DECOMPOSITION TEMPERATURE:	Not established
VISCOSITY:	No data available.
SOLIDS (% by weight):	63.7
VOC, weight percent	0.77
VOC, U.S. EPA Method 24, less water and exempt solvents (analytically determined)	19g/liter of material

SECTION 10: STABILITY AND REACTIVITY

STABILITY:	Stable under normal conditions.
CHEMICAL INCOMPATIBILITY:	Not established
HAZARDOUS POLYMERIZATION:	Will not occur.
HAZARDOUS DECOMPOSITION PRODUCTS:	Carbon monoxide, carbon dioxide

SAFETY DATA SHEET**SECTION 11: TOXICOLOGICAL INFORMATION****Component Toxicity / Toxicology Data:**

COMPONENT NAME	LD50/LC50
2,2,4-Trimethyl-1,3-pentenediolmonoisobutyrate	Oral LD50 Rat 3,200 mg/kg
Cellulose	Oral LD50 Rat > 5 g/kg

This product is a mixture. Unless noted, the information below is based on components.

Skin corrosion / irritation: No irritation hazard in normal industrial use.

Serious eye damage / irritation :No irritation hazard in normal industrial use.

Respiratory / skin sensitization: No data available.

Germ cell mutagenicity: No data available.

Carcinogenicity: Contains a material that may cause cancer.

Reproductive toxicity: No data available.

Specific target organ toxicity-single exposure: No data available.

Respiratory irritation / Narcotic effects: No data available.

Specific target organ toxicity-repeated exposure: No data available.

Target organs potentially affected by exposure: Lungs

Aspiration hazard: Not an aspiration hazard.

Medical Conditions Aggravated by Exposure: Lung disease

SECTION 12: ECOLOGICAL INFORMATION

OVERVIEW: No ecological information available for this product.

MOBILITY: No data available.

PERSISTENCE: No data available.

BIOACCUMULATION: No data available.

This product has not been tested for ecological effects. Relevant information for components is listed below:

Component:	Ecotoxicity values:
2,2,4-Trimethyl-1,3-pentenediolmonoisobutyrate	Acute Toxicity (Fish): 96 Hr LC50 Pimephales promelas: 30 mg/L Acute Toxicity (Daphnia): Not established Acute Toxicity (Algae): 72 Hr EC50 Pseudokirchneriella subcapitata: 18.4 mg/L

SECTION 13: DISPOSAL CONSIDERATIONS

To the best of our knowledge, this product does not meet the definition of hazardous waste under the U.S. EPA Hazardous Waste Regulations 40 CFR 261. Solidify and dispose of in an approved landfill. Consult state, local or provincial authorities for more restrictive requirements.

SECTION 14: TRANSPORT INFORMATION

Consult Bill of Lading for transportation information.

US DOT: NOT REGULATED

IATA: NOT REGULATED

SAFETY DATA SHEET**SECTION 15: REGULATORY INFORMATION****INVENTORY STATUS**

U.S. EPA TSCA:	This product is in compliance with the Toxic Substances Control Act's Inventory requirements.
CANADIAN CEPA DSL:	The components of this product are included on the DSL or are exempt from DSL requirements.
EUROPEAN REACH:	As a result of the introduction of REACH into Europe, this product cannot be imported into Europe unless the REACH requirements are met.
AUSTRALIA AICS:	This product is in compliance with the Australian Inventory of Chemical Substances requirements.
PHILIPPINES:	This product is in compliance with the Philippine Inventory of Chemicals and Chemical Substances requirements.
CHINA IECSC INVENTORY:	This product is in compliance with the Inventory of Existing Chemical Substances in China (IECSC) requirements.

If you need more information about the inventory status of this product call 651-236-5858.

This product may contain chemical substances that are regulated for export by various government agencies (such as the Environmental Protection Agency, the Bureau of Industry and Security, or the Drug Enforcement Administration, among others). Before exporting this product from the USA or Canada, we recommend you contact us at reg.request@hbfuller.com to request an export review.

This product contains a chemical substance that is subject to a Significant New Use Rule (SNUR) under Section 5(a)(2) of TSCA:	.alpha.-(4-Nonylphenyl)-.omega.-hydroxy-poly(oxy-1,2-ethanediyl)
	79 FR 59186, Oct 1, 2014 (Proposed rule)

FEDERAL REPORTING

*This product contains one or more materials that may be hazardous when present as an airborne dust. During normal handling of the product, the material is encapsulated within the product and will not present an exposure risk. Once the product has reached its final state and is abraded or disturbed, dusting and exposure may occur. This product contains titanium dioxide, which is hazardous when present as an airborne dust. As provided, and during normal use of this product, this substance is encapsulated within the product. As such, it is considered to be inextricably bound, and not readily available for exposure. This product contains crystalline silica. As provided, and during normal use of this product, the crystalline silica is encapsulated within the product. As such, it is considered to be inextricably bound, and not readily available for exposure. Use of this product would not subject the user to the compliance requirements of 29CFR1910.1053 or 1926.1153.

EPA SARA Title III Section 313

Unless listed below, this product does not contain toxic chemical(s) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR part 372. EPA has advised that when a percentage range is listed the midpoint may be used to fulfill reporting obligations.

Chemical Name	CAS#	%
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STATE REPORTING

Proposition 65, The Safe Drinking Water and Toxic Enforcement Act of 1986:

Unless listed below, this product does not contain known levels of any chemical known to the State of California to cause cancer or reproductive harm.

Chemical Name/List	CAS	Percent
Titanium dioxide (Carcinogen)	13463-67-7	1 - 5
Quartz (Carcinogen)	14808-60-7	0.1 - 1

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Carbon black	(Carcinogen)	1333-86-4	0.1 - 1
Acetaldehyde	(Carcinogen)	75-07-0	0.001 - 0.01
Formaldehyde	(Carcinogen)	50-00-0	0.001 - 0.01
Ethyl acrylate	(Carcinogen)	140-88-5	< 10 ppm
Lead	(Carcinogen)	7439-92-1	< 10 ppm
Cadmium	(Carcinogen)	7440-43-9	< 10 ppm
Methyl isobutyl ketone	(Carcinogen)	108-10-1	< 10 ppm
1,4-Dioxane	(Carcinogen)	123-91-1	< 10 ppm
Ethylene glycol	(Developmental toxin)	107-21-1	0.1 - 1
Methanol	(Developmental toxin)	67-56-1	< 10 ppm
Lead	(Developmental toxin)	7439-92-1	< 10 ppm
Cadmium	(Developmental toxin)	7440-43-9	< 10 ppm
Methyl isobutyl ketone	(Developmental toxin)	108-10-1	< 10 ppm
Lead	(Female reproductive toxin)	7439-92-1	< 10 ppm
Lead	(Male reproductive toxin)	7439-92-1	< 10 ppm
Cadmium	(Male reproductive toxin)	7440-43-9	< 10 ppm

Substances of Very High Concern (SVHC) Content:

Unless listed below, this product does not contain SVHC's at 0.1% or greater, as of the version date of this SDS.

4-Nonylphenol, ethoxylated
 tert-Octylphenol, ethoxylated
 4-Nonylphenol, ethoxylated

SECTION 16: OTHER INFORMATION

SDS VERSION DATE: 03-07-2017

This Safety Data Sheet is prepared to comply with the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200) and the Canadian Workplace Hazardous Materials Information System (WHMIS).

HMIS RATING: HEALTH -- 0 FLAMMABILITY -- 0 REACTIVITY -- 0

See SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for personal protective equipment recommendations.

Prepared by: The Global Regulatory Department

Phone: 651-236-5842

The information and recommendations set forth herein are believed to be accurate. Because some of the information is derived from information provided to H.B. Fuller Construction Products, Inc. from its suppliers, and because H.B. Fuller Construction Products, Inc. has no control over the conditions of handling and use, H.B. Fuller Construction Products, Inc. makes no warranty, expressed or implied, regarding the accuracy of the data or the results to be obtained from the use thereof. The information is supplied solely for your information and consideration, and H.B. Fuller Construction Products, Inc. assumes no responsibility for use or reliance thereon. It is the responsibility of the user of H.B. Fuller Construction Products, Inc. products to comply with all applicable federal, state and local laws and regulations.

SAFETY DATA SHEET

Revision Date: 02/14/18

SECTION I - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : SE-110 MS
PRODUCT GRADE/TYPE : SPECIALTY ACRYLIC PRIMER COATING
SDS NUMBER : SE-110MS-1
PRODUCT USE : Multi-surface primer with corrosion and mold growth inhibitors
MANUFACTURER : SAFE ENCASMENT SYSTEMS
257 Walnut Street
Napa, CA 94559


PRODUCT INFORMATION : 1-888-277-8834
EMERGENCY CONTACT : 1-800-424-9300

RDS IDENTIFICATION

GHS CLASSIFICATION:

Skin Sensitization, Category 1

GHS LABEL:

Hazard Category	Signal Word	Pictogram	Hazard Statement	GHS Pictogram Number
Skin Sensitization, Category 1	Warning		H317- May cause an allergic skin reaction	GHS07

GHS Precaution Phrases:

Hazard Category	Prevention	Response	Storage	Disposal
Skin Sensitization, Category 1	P261, P272, P280	P302+P352, P333+ P313; P321: P363	-----	P501

P Statements:

P261: Avoid breathing dust/fumes/gas/mist/vapors/spray. [As modified by IV ATP]
P272: Contaminated work clothing should not be allowed out of the workplace.
P280: Wear protective gloves/protective clothing/eye protection/face protection. [As modified by IV ATP]
P302 + P352 – IF ON SKIN: Wash with plenty of soap and water.
P333 + P313 – If skin irritation or rash occurs: Get medical advice/attention.
P321 – Specific treatment (see ... on this label).
P362 – Take off contaminated clothing and wash before reuse.
P501 – Dispose of contents/container to ...

SECTION III – COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS No.	Weight %	Hazards (GHS) and Category
Mixture: Poly(oxy-1,2-ethanediyl), alpha-[(1,1,3,3-tetramethylbutyl)phenyl]-omega- reaction mass of: 5- chloro-2-methyl-4 isothiazolin-3-one [EC no.247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-	9036-19-5 55965-84-9	----- <0.5%	No label Skin sensitizer

SECTION IV – FIRST AID MEASURES

- Eye Contact:** Eye irritation. Flush immediately with large amounts of water for at least 20 minutes. Eyelids should be held away from eyeball to ensure thorough rinsing. Get immediate medical attention.
- Skin Contact:** Itching or burning of the skin. Immediately wash skin with soap and plenty of water while removing contaminated clothing and shoes. If skin irritation occurs, get immediate medical attention.
- Inhalation:** If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. If signs/symptoms continue, get medical attention.
- Ingestion :** If ingested, rinse mouth. Drink 1-2 glasses of water. Do not give anything by mouth to an unconscious person. Do not induce vomiting unless directed to do so by a medical personnel. Get medical attention.

SECTION V – FIRE-FIGHTING MEASURES

Suitable Extinguishing Media : Use dry chemical, foam or carbon dioxide to extinguish fire. Do not use a direct stream of water.

Specific hazards arising from the chemical: Dangerous when exposed to heat or flame. Will form flammable or explosive mixtures with air at room temperature. Irritating or toxic substances may be emitted upon thermal decomposition. Thermal decomposition products may include oxides of carbon and nitrogen. Vapor or gas may spread to distant ignition sources and flash back. Vapors or gas may accumulate in low areas. Runoff to sewer may cause fire or explosion hazard. Containers may explode in heat of fire. Containers may explode in heat of fire. Vapors may concentrate in confined areas. Liquid will float and may reignite on the surface of water.

Special protective action for fire-fighters:

No action shall be taken involving any personal risk or without suitable training.

Move containers from the fire area if you can do it without personal risk.

Exposed fire-fighters must wear NIOSH approved positive pressure self-contained breathing apparatus with full face mask and full protective clothing.

Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection.

SECTION VI – ACCIDENTAL RELEASE MEASURES

Personal Precautions: Ventilate enclosed areas.

Use personal protective equipment.

Keep people away from and upwind of spill/leak.

Material can create slippery conditions. Do not touch or walk through spilled material.

Emergency Procedures: Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate areas).

As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. If tank, rail car or tank truck is involved in a fire, isolate for 800 meters (1/2 mile) in all directions, also consider initial evacuation for 800 meters (1/2 mile) in all directions. LARGE SPILL: Consider initial downwind evacuation for at least 300 meters (1000 feet). Keep out of low areas. Stay upwind. Keep unauthorized personnel away. Ventilate closed spaces before entering.

Personal Precautions: Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

Methods of Cleaning up: Stop leak if you can do it without risk.

Contain spills immediately with inert materials (e.g. sand, warth). Use non-sparking tools to collect absorbed material.

Transfer liquids and solid diking material to separate suitable containers for recovery or disposal.
All equipment use when handling the product must be grounded.

SECTION VII – HANDLING AND STORAGE

Precautions for safe handling:

Keep away from fire. Keep away from heat and sparks. Do not eat, drink or smoke when using this product. After handling wash hands thoroughly. Prevent formation of aerosols. All equipment used in handling the product must be grounded. Bound and ground all transfer containers and equipment. Take precautionary measures against static charges. Containers, even those that have been emptied, can contain explosive vapors. Do not cut, grind, drill, weld or perform similar operations near container.

Conditions for safe storage: **Storage :** Keep containers properly sealed in a cool, dry, well-ventilated area between 65-85 F (18.3-29.4 F) Do not store in open, unlabeled or mislabeled containers. Do not reuse empty container without commercial cleaning or reconditioning.

Storage Period: 12 months

Keep container closed when not in use. Protect from freezing.

SECTION VIII – EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters:

Components with occupational exposure limits:

2682-20-4: 2-Methyl-2H-isothiazol-3-one

55965-84-9: reaction mass of: 5- chloro-2-methyl-4 isothiazolin-3-one [EC no.247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)

- Engineering Controls :** Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Use explosion-proof electrical/ventilating/lighting/equipment.
- Protective Measures :** Employees should wash their hands and face before eating, drinking or using tobacco products. Educate and train employees in the safe use and handling of this product. EMERGENCY SHOWERS AND EYE WASH STATIONS SHOULD BE AVAILABLE.
- Eye/face Protection :** Safety glasses with side-shields.
- Skin Protection :** Impervious (Neoprene gloves). Wear clothing and footwear that cannot be penetrated by chemicals.
- Respiratory Protection :** Use only with ventilation to keep levels below exposure guidelines reported in this document. If not sure, and/or not able to monitor, use State or federally approved supplied air-respirator. Wear suitable respirator (MSHA/NIOSH approved or equivalent) where exposure limits are exceeded.

SECTION IX – PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Liquid, dispersion
Odour:	Characteristic odor, faint odor
Odour threshold:	Not available
pH:	approximately 8-9
Melting point/freezing point:	Not determined
Boiling Point/boiling range:	57°C (134.6°F) similar to water
Flash Point:	not applicable
Evaporation Rate:	Data lacking
Flammability:	Flammable liquid
Upper/Lower Flammability or explosive limits:	Not available
Vapor Pressure:	Data Lacking
Vapor density	Not available

Relative density:	Data Lacking
Solubility: in water	Immiscible
Partition Coefficient: n-octanol/water:	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Viscosity:	Not determined
VOC Content g/l:	no data

Note: The above data are typical values and must not be construed as a specification.

SECTION X – STABILITY AND REACTIVITY

Reactivity:	No dangerous reaction known under conditions of normal use.
Chemical Stability:	Stable under normal temperatures and pressure.
Possibility of hazardous reactions:	None known.
Conditions/Materials to avoid:	Avoid flames, sparks or other sources of ignition.
Incompatible Materials:	oxidizing agents.
Hazardous decomposition:	By Thermal decomposition: carbon monoxide, carbon dioxide, Oxides of nitrogen (NOx), other potentially toxic fumes, dense black smoke.

SECTION XI – TOXICOLOGICAL INFORMATION

Acute Toxicity:

Other GHS- Hazards Classification	Experimental/calculated data
Acute Toxicity	LD50 rar (oral):>2000-10000mg/kg
Irritation	Skin Corrosion/irritation: rabbit: non-irritant (OECD Guideline 404) Serious Eye Damage/irritation rabbit: non-irritant (OECD Guideline 405)
Respiratory/Skin Sensitization	The product has not been tested. Declaration is from individual components.
Germ Cell Mutagenicity	Not mutagenic in bacteria
Carcinogenicity	None
Reproductive Toxicity	None
Developmental Toxicity	Data not sufficient for evaluation
Experiences in humans	Not harmful if used in correct levels.
STOT: Single	None
Repeated Dose Toxicity and STOT/Repeated	No adverse effects-derived from similar substances
Aspiration Hazard	Not Applicable
Other Relevant Toxicity Information	As derived from similar products-no adverse health effects are expected if handles as recommended with suitable precautions for designated uses.

SECTION XII – ECOLOGICAL INFORMATION

Toxicity:

To Fish: LC50 (96 h)

Species	Duration	Results	Exposure Conditions
Fish: Brachydanio rerio	96 hours	EC50>100 mg/l	OECD Guideline 203, static
Aquatic invertebrates, Daphnia magna	48 hours	EC50>100 mg/ml	OECD Guideline 202, static
Aquatic Plants, Scenedesmus	72 hours	EC50>100	OECD Guideline 201,

subspicatus		mg/ml	normal concentration
Microorganisms /Effect on activated sludge	0.5 hours	EC50>100 mg/ml	DIN EN ISO 8192- OECD 209-88/302/, P

The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

Persistence and Degradability:

Assessment biodegradation and elimination (H2O): The product can be virtually eliminated from water by abiotic processes e.g. adsorption onto activated sludge.

Elimination information:

>70% DOC reduction (OECD 302B; ISO 9888; 88/302/EEC, part C) Easily eliminated from water.

Bioaccumulative Potential: Not available for components and mixtures in the products listed. Accumulation organisms is not to be expected.

Mobility in Soil: Assessment transport between environmental compartments:

Volatility: No data available. Water Hazard Class 2 (self-assessment): Hazardous to water. Do not allow product to reach sewage system. Disposal must be made according to official regulations.

Results of PVT and vPvB assessments:

According to Regulation (EC) no 453/2010: The product does not fulfill the criteria for PBT (Persistent/bioaccumulative/toxic) vPvB (very Persistent/very bioaccumulative).

Other adverse effects: No data available.

Ecological data are determined by analogy.

SECTION XIII – DISPOSAL INFORMATION

Environmental Precautions:

Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

Waste Disposal Method:

Waste disposal should be in accordance with existing federal, state and local environmental laws.

Empty Container Precautions:

Recondition or dispose of empty container in accordance with governmental regulations. Do not reuse empty container without proper cleaning.

SECTION XIV – TRANSPORT INFORMATION

	14.1 UN Number	UN Proper Shipping Name	14.3 Transport Hazard Class	14.4 Packing Group	14.5 Environmental Hazards
ADR	Not applicable	Not applicable	None	Not applicable	None known
RID	Not applicable	Not applicable	None	Not applicable	None known
IMDG	Not applicable	Not applicable	None	Not applicable	None known
ADN	Not applicable	Not applicable	None	Not applicable	None known
IATA/ICAO	Not applicable	Not applicable	None	Not applicable	None known

14.6 Special Precautions: None known.

14.7 Transport in Bulk according to Annex II of MARPOL 73/78 and the IBC Code- Not evaluated

SECTION XV – REGULATORY INFORMATION

SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATIONS SEPECIFIC FOR THE SUBSTANCE OR MIXTURE

Prohibitions, Restrictions and Authorizations:

Annex XVII of Regulation (EC) No 1907/2006: Number on List: 3, 46

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

Chemical Safety Assessment: Chemical Safety Assessment is not required.

SECTION XVI – OTHER INFORMATION

Legend:

Acronym	Meaning
GHS	Globally Harmonized System (of Classification and Labeling of Chemicals)
IMDG	International Maritime Dangerous Goods
ICAO	International Civil Aviation Organization
IATA	International Air Transport Association

The information in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. The information relates only to the specific material designated and may not be valid for such material used in combination with or any other material in any process, unless specified in the test.

Version #: GHS-045

Revision Date: 1/29/18

Supersedes Last Revision: May 2008

This SDS adheres to the standards and regulatory requirements of the United States and has been written under the guidance of the Globally Harmonized System of Classification and Labeling of Chemicals.

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SAFETY DATA SHEET

Revision Date: 02/14/18

SECTION I - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : SE-120
PRODUCT NAME : PROTECTIVE- SKIN
SDS NUMBER : SE-120-1
PRODUCT USE : ACRYLIC COATING
MANUFACTURER : SAFE ENCASEMENT SYSTEMS
257 Walnut Street
Napa, CA 94559

PRODUCT INFORMATION : 1-888-277-8834
EMERGENCY CONTACT = 1-800-424-9300

SECTION II – HAZARDS IDENTIFICATION

GHS CLASSIFICATION: NON-HAZARDOUS
GHS LABEL: None

SECTION III – COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS No.	Weight %
Titanium dioxide (unbound only)	13463-67-7	3-7
Limestone	1317-65-3	10-40
Zinc Oxide	1314-13-2	2-4

The hazards of the listed titanium dioxide, crystalline silica (Quartz) from limestone and ZnO are for their powder unbound form. In the bound form and when used for application as a roof coating for which the products are designed, these ingredients are not hazardous.

SECTION IV – FIRST AID MEASURES

Eye Contact: Eye irritation. Flush immediately with large amounts of water for at least 15 minutes. Eyelids should be held away from eyeball to ensure thorough rinsing. Get immediate medical attention.

Skin Contact: Itching or burning of the skin. Immediately flush the skin with plenty of water while removing contaminated clothing and shoes. Get immediate medical attention.

Inhalation: Nasal irritation, headache, dizziness, nausea, vomiting. Heart palpitations, breathing difficulty, cyanosis, tremors, weakness, red flushing of face, irritability. Remove exposed person from source of exposure to fresh air. If not breathing, clear airway and start cardiopulmonary resuscitation (CPR). Avoid mouth to mouth resuscitation. Get medical attention immediately.

Ingestion : If ingested, do not induce vomiting unless directed to do so by a medical personnel. Get medical attention.

SECTION V – FIRE-FIGHTING MEASURES

Suitable Extinguishing Media : Use dry chemical, foam or carbon dioxide to extinguish fire.

Specific hazards arising from the chemical: Dangerous when exposed to heat or flame. Will form flammable or explosive mixtures with air at room temperature. Irritating or toxic substances may be emitted upon thermal decomposition. Thermal

decomposition products may include oxides of carbon and nitrogen. Vapor or gas may spread to distant ignition sources and flash back. Vapors or gas may accumulate in low areas. Runoff to sewer may cause fire or explosion hazard. Containers may explode in heat of fire. Containers may explode in heat of fire. Vapors may concentrate in confined areas. Liquid will float and may reignite on the surface of water.

Special protective action for fire-fighters: Water should be used to cool fire-exposed containers, structures and to protect personnel. Use water to dilute spills and flush them away from sources of ignition. Do not flush down sewers or other drainage systems. Exposed fire-fighters must wear NIOSH approved positive pressure self-contained breathing apparatus with full face mask and full protective clothing.

SECTION VI – ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use personal protective equipment.
Keep people away from and upwind of spill/leak.
Material can create slippery conditions.

Environmental Precautions: Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

Methods of Cleaning up: Contain spills immediately with inert materials (e.g. sand, warth).
Transfer liquids and solid diking material to separate suitable containers for recovery or disposal.

SECTION VII – HANDLING AND STORAGE

Precautions for safe handling:

Avoid breathing dust, vapor or mist. Avoid contact with skin or clothing. Avoid contact with eyes. Use only with adequate ventilation/personal protection. Wash thoroughly after handling. Use personal protective equipment in handling and observe personal hygiene after use of the product.

Conditions for safe storage : **Storage Temperature:** Minimum : 40°F (4.44°C)
Maximum: 100°F (37.77°C)

Storage Period: 12 months

Keep container closed when not in use. Protect from freezing.

SECTION VIII – EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters:

Component	CAS #	Regulation	Type of Listing	Occupational Exposure Limits
Titanium dioxide	13463-67-7	JSOH OELs (05 2009	TWA TWA	1 mg/m3 (Respirable dust) 4 mg/m3 (Total dust)
		US ACGIH (2011)	TWA	10 mg/m3
Zinc oxide	1314-13-2	ACGIH	TWA STEL	2 mg/m3 10 mg/m3
		OSHA	PEL	5 mg/m3 (fume, respirable fraction) 15 mg/m3 (Total dust)
Calcium Carbonate (in Limestone)	1317-65-3	OSHA	TWA	5 mg/m3 (Respirable fraction) 15 mg/m3 (Total dust)
		NIOSH	TWA	10 mg/m3 (Total dust) 5 mg/m3 (respirable dust)
Quartz (in limestone) Quartz (in limestone)	14808-60-7	ACGIH	TWA	0.025 mg/m3 (respirable fraction)
		OSHA NIOSH	TWA	0.1 mg/m3 (respirable dust) 0.05 mg/m3 (respirable dust)

Engineering Controls: : Mechanical local exhaust ventilation at point of containment release.

Protective Measures : Employees should wash their hands and face before eating, drinking or using tobacco

products. Educate and train employees in the safe use and handling of this product.
EMERGENCY SHOWERS AND EYE WASH STATIONS SHOULD BE AVAILABLE.

Eye/face Protection : Chemical splash goggles (ANSI Z-87.1 or approved equivalent)

Skin Protection : Impervious (Neoprene gloves)

Respiratory Protection : Wear suitable respirator (MSHA/NIOSH approved or equivalent) where exposure limits are exceeded.

SECTION IX – PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Liquid (MILKY WHITE)
Odour:	Slight amine odor
Odour threshold:	Not available
pH:	8.5-10.4
Melting point/freezing point:	0°C (32°F) similar to water
Boiling Point/boiling range:	100°C (212°F) similar to water
Flash Point:	Not applicable (water based product), however, solid material will support combustion if water has been evaporated.
Evaporation Rate:	Not available
Flammability:	Not available
Upper/Lower Flammability or explosive limits:	Not available
Vapor Pressure:	18 mm Hg at 20°C (68.°F) similar to water
Vapor density:	Not available
Relative density:	10.5-11.7#/gal
Solubility: in water	Soluble
Partition Coefficient: n-octanol/water:	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Viscosity:	100-115 ku

Note: The above data are typical values and must not be construed as a specification.

SECTION X – STABILITY AND REACTIVITY

Reactivity: Non-reactive

Chemical Stability: Stable

Possibility of hazardous reactions: None known.

Conditions/Materials to avoid: Keep from freezing/No known materials to avoid

Incompatible Materials: None known.

Hazardous decomposition: By Thermal decomposition: carbon monoxide, carbon dioxide, acrylic monomers, other potentially toxic fumes

SECTION XI – TOXICOLOGICAL INFORMATION

Acute Toxicity:

Component	Acute Oral	Acute Dermal	Acute Inhalation
Titanium Dioxide	LD50 rat >5000 mg/kg	LD50:>5000 mg/kg (Rabbit)	LC50/4h/rat (dust/mist):>6.82 mg/l, 4 h (Rat)
Limestone	LD50 rat >6450 mg/kg	Not available	Not available
Zinc Oxide	Not available	Not available	LC50>2500 mg/m3, (mouse
Mixture	Not available	Not available	Not available

Skin/Eye Irritation:

Titanium Dioxide	Rabbit, Exposure Time, 24 h, Non-Irritating
Limestone & Zinc Oxide	Not available
Mixture	Not available

Mutagenicity:

Titanium Dioxide with/without)	Genetic Toxicity in Vitro: Ames: negative (Salmonella typhimurium, Metabolic Activation: Genetic Toxicity in Vivo: Drosophila SLRL test: negative (Drosophila melanogaster)
Limestone & Zinc Oxide	Not available
Mixture	Not available

Carcinogenicity:

Titanium dioxide (Ti-Pure, DuPont)	Rat, Male/Female, inhalation-According to IARC, several rat inhalation and intratracheal installation studies using titanium dioxide have shown increases in benign and malignant lung tumors. Based upon all study results, DuPont scientists conclude that titanium dioxide will not cause lung cancer or chronic respiratory diseases in humans at concentrations experience in the workplace. Reviewed human exposure data did not suggest an association between occupational exposure to titanium dioxide and cancer. Additionally, the IARC working group determined that, "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium dioxide is bound to other material, such as in paints."
Quartz (in Limestone)	ACGIH: A2-suspected human carcinogen NIOSH: Potential occupational carcinogen IARC : Monograph 68 (1997) (Listed under Crystalline Silica inhaled in the form of quartz or cristobalite From occupational sources) (Group 1-Carcinogenic to humans)
Limestone & Zinc Oxide	Not available
Mixture	Not available

Sensitization:

Titanium dioxide	Dermal: non-sensitizer (Guinea pig, Maximization Test), non-sensitizer (Human, Patch Test) Repeated Dose toxicity: 28 days, Inhalation: NOAEL: 35mg/m3, (Rat)
Quartz, zinc oxide, mixture	Not available

Reproductive toxicity, STOT, Aspiration hazard- Not available for components and mixture in the products listed.

Other Toxicological Information:

*Reviewed human exposure data did not suggest an association between occupational exposure to titanium dioxide and cancer. Additionally, the IARC working group determined that, "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium dioxide is bound to other material, such as in paints."

SECTION XII – ECOLOGICAL INFORMATION

Ecotoxicity:

Titanium dioxide	Aquatic Toxicity: 96 hr LC50: Fathead minnow > 1,000 mg/l; LC50: > 1000 mg/l (Golden Orfe (Leuciscus idus), 48 hours) ; Acute Toxicity to Aquatic invertebrates: EC50 > 3 mg/l (Water Flea (Daphnia Magna)) Toxicity to Microorganisms : EC50 > 10,000 mg/l, (Pseudomonas fluorescens, 24 h)
Limestone	Acute and Prolonged toxicity to Fish: LC50: 56,000 mg/l (Mosquitofish (Gambusia affinis), 48 hours)

Persistence and Degradability, Bioaccumulative Potential, Mobility in Soil: Not available for components and mixtures in the products listed

SECTION XIII – DISPOSAL INFORMATION

Environmental Precautions:

Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

Waste Disposal Method:

Waste disposal should be in accordance with existing federal, state and local environmental laws.

Empty Container Precautions:

Recondition or dispose of empty container in accordance with governmental regulations. Do not reuse empty container without proper cleaning.

SECTION XIV – TRANSPORT INFORMATION

UN Number : Not applicable
UN proper Shipping Name : Not applicable
Transport Hazard Class : Not applicable
Packing Group : Not applicable
Environmental Hazards : Not hazardous

Land Transport (DOT) : Non-Regulated

Sea Transport (IMDG) : Non-Regulated

Air Transport (ICAO/IATA) : Non-Regulated

Special Precautions : No data available

SECTION XV – REGULATORY INFORMATION

Unites States TSCA Inventory (US.TSCA): All components of this product are in compliance with the inventory listing requirement of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

CERCLA Information (40CFR302.4): Release of this material to air, land, or water are not reportable to the National Response Center under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) or to the state and local emergency planning committees under the Superfund Amendments and Reauthorization Act (SARA) Title Section 304.

SARA TITLE III, Sections 302, 304, 311, 312: This material does not contain any component listed in EPA's List of List.

Workplace Classification:

OSHA : This product is considered not hazardous under OSHA Hazard Communication Standard (29CFR 1910.1200).

WHMIS : This product and its components are not listed as a 'controlled product' under the Canadian Workplace Hazardous Materials Information System (WHMIS).

Proposition 65 : This product contains a chemical known to cause cancer or reproductive toxicity:

Component	CAS #	Authoritative Body	Date entered
Titanium dioxide (airborne, unbound)	(none), several substances for single listing	Labor code (LC)	September 2, 2011

particles of respirable size)			
Silica, crystalline (airborne particles of respirable size); 0.5% in Limestone	(none), several substances for single listing	State's Qualified Expert (SQE)	October 1, 1988

SECTION XVI – OTHER INFORMATION

HMIS Rating:

Health	Flammability	Physical Hazard
1	0	0

Legend:

Acronym	Meaning
ACGIH	American Conference of Governmental Hygienists
OSHA	Occupational Safety Health Administration
SARA	Superfund Amendment Reauthorization Act
TRI	Toxic Release Inventory
GHS	Globally Harmonized System (of Classification and Labeling of Chemicals)
DOT	Department of Transportation
IMDG	International Maritime Dangerous Goods
ICAO	International Civil Aviation Organization
IATA	International Air Transport Association

The information in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. The information relates only to the specific material designated and may not be valid for such material used in combination with or any other material in any process, unless specified in the test.

Version #: GHS-044

Revision Date: 1/25/18

Supersedes Last Revision: January 2006

This SDS adheres to the standards and regulatory requirements of the United States and has been written under the guidance of the Globally Harmonized System of Classification and Labeling of Chemicals.

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ISSUE DATE: 1/15/1990

REVISION DATE: 4/15/2015

1. PRODUCT AND COMPANY IDENTIFICATION**GHS PRODUCT IDENTIFIER:**

TRADE NAME; CHEMSAFE 500C

OTHER MEANS OF IDENTIFICATION:**RECOMMENDED USE OF THE CHEMICAL AND RESTRICTIONS ON USE:**

RECOMMENDED USE: Particulate encapsulation.

SUPPLIER'S DETAILS:

1480 GRANDVIEW AVE.
THOROFARE, NJ 08086
(800)767-6933

EMERGENCY PHONE NUMBER:

COMPANY PHONE NUMBER: (800)767-6933

(24HR) EMERGENCY NUMBER: CHEM-TREC (800)424-9300

2. HAZARD IDENTIFICATION**GHS CLASSIFICATION:**

GHS CLASSIFICATION SCALE: (1=SEVERE HAZARD, 4=SLIGHT HAZARD)

SERIOUS EYE DAMAGE IRRITATION

CATEGORY 2B

LABEL ELEMENTS:**SIGNAL WORD: WARNING****HAZARD STATEMENTS:**

Causes eye irritation

HAZARD SYMBOLS:**PRECAUTIONARY STATEMENTS:**

Keep out of reach of children
 Avoid breathing dust/mist/vapors/spray.
 Wash thoroughly after handling.
 Wear protective gloves/protective clothing/eye protection/face protection

PRECAUTIONARY STATEMENTS (RESPONSE):

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

PRECAUTIONARY STATEMENTS (STORAGE)

Keep out of reach of children

PRECAUTIONARY STATEMENTS (DISPOSAL):

Dispose of contents/container to an approved waste disposal plant in accordance with applicable local/regional/national and international regulations and product characteristics at time of disposal.

OTHER HAZARDS:

Repeated or prolonged exposure can cause skin dryness or cracking.

3. COMPOSITION INFORMATION ON INGREDIENTS

INGREDIENT IDENTITY	CAS NUMBER	PERCENTAGE
Acrylic emulsion		PROPRIETARY

REMAINING INGREDIENTS ARE NOT REPORTABLE UNDER OSHA/SDS GUIDELINES. THE EXACT PERCENTAGES OF SOME INGREDIENTS HAVE BEEN WITHHELD AS (CBI) CONFIDENTIAL BUSINESS INFORMATION TRADE SECRET.

4. FIRST AID MEASURES

INGESTION: If swallowed, wash out mouth with water. Do not induce vomiting unless told to do so by a doctor or professional healthcare provider. If spontaneous vomiting occurs, keep head below hips to prevent aspiration of liquid into the lung. Never give anything by mouth to an unconscious person.

SKIN CONTACT: In case of accidental skin contact, remove contaminated clothing. Wash with soap and plenty of water for 15 minutes. Wash contaminated clothing before reuse. If irritation occurs get medical advice.

INHALATION: No irritation expected; however if irritation occurs, move individual away from exposure and into fresh air. If breathing is irregular or stopped, administer artificial respiration. In case of shortness of breath, give oxygen. Call a physician immediately.

EYE CONTACT: If in eyes, rinse cautiously with water for several minutes. Remove contact lenses if easy to do. Continue rinsing. If eye irritation persists, get medical attention/advice.

Most Important Symptoms and Effects, Acute and Delayed

INGESTION: Symptoms may include diarrhea, gastric pain, and vomiting.

SKIN CONTACT: Symptoms may include redness, dryness and cracking of skin.

INHALATION: Not expected; however symptoms could include irritation of respiratory tract.

EYE CONTACT: Symptoms may include stinging, tearing, redness and blurred vision.

Indication of immediate medical attention and special treatment needed, if necessary.

Treat Symptomatically.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media: Use fire extinguishers suitable for surrounding fire.

Unsuitable extinguishing media- Not flammable

Specific hazards arising from the chemical: In a fire or if heated, a pressure increase can occur and the container may burst.

Hazardous thermal decomposition products: carbon monoxide and CO₂, possibly ammonia, irritating gases

Special protective actions for fire-fighters: Keep product containers and surrounding areas cool with water spray. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters: Fire fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Avoid breathing mists. Put on appropriate personal protective equipment. Wear appropriate respirator when ventilation is inadequate.

For emergency responders: If specialized clothing is required to deal with the spillage, take note of information in section 8 for further information. See also information in non-emergency personnel above.

Environmental precautions: Avoid dispersal of spilled material with waterways, drains and sewers. See section 12 for additional ecological information.

Methods and materials for containment and cleaning up.

Small spill: Stop leak if without risk. Move containers from the spill area. Absorb with an inert dry material such as diatomaceous earth or vermiculite and place in an appropriate waste disposal container. Mop any remaining residues with soap and water and dispose of wastes via a licensed waste disposal contractor according to federal, state and local regulations.

Large spill: Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, drains, water courses and confined areas. Wash spillages into an effluent treatment plant or absorb with an inert dry material such as diatomaceous earth or vermiculite and place in a appropriate waste disposal containers. Mop any remaining residues with soap and water and dispose of wastes via a licensed waste disposal contractor according to federal, state and local regulations.

7. HANDLING AND STORAGE

Precautions for Safe Handling:

Safe Handling Advice: Utilize appropriate personal protective equipment when handling product. Do not swallow. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mists. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container and tightly closed when not in use. Wash face, hands and any exposed skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection and face protection during use. Emptied containers can contain product residues and require handling with all safety precautions in mind listed on this sds. Do not reuse container and dispose of in accordance with federal, state and local regulations.

Advice on general occupational hygiene: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also section 8 for additional hygiene information.

Conditions for safe storage including any incompatibilities:

Store in original container in a dry, cool and well ventilated area away from strong oxidizing agents (see section 10) and food and drink. Keep container tightly closed when not in use and away from children. Do not store in unlabeled containers. Do not freeze.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

<u>Control Parameters</u>	<u>Occupational Exposure Limits</u>		
<u>Ingredient Identity</u>	<u>ACGIH TLV</u>	<u>OSHA PEL</u>	<u>NIOSH IDLH</u>

No Components found

Appropriate Engineering Controls

Engineering Controls: Use only with adequate ventilation. General room ventilation is required. Local mechanical ventilation may be necessary if working with this product in enclosed areas and/or at elevated temperatures. Maintain adequate ventilation. Avoid creating dust or mist. Do not use in closed or confined spaces without adequate ventilation.

Individual protection measures, such as personal protective equipment. (PPE)

Eye/Face Protection: Wear approved safety goggles with side shields. Wear additional eye protection such as chemical safety goggles and/or face shield when the possibility exists for eye contact with splashing or spraying liquid, or airborne material.

Skin & Body Protection: Wear chemical resistant, impervious gloves at all times when handling chemical products. Check during use that gloves are still retaining their impervious properties, as the time for breakthrough can change from different manufacturers and chemical mixtures can not always be accurately measured. Appropriate footwear and suitable protective clothing should be worn for the degree and risk of exposure.

Respiratory Protection: If workplace exposure limits of product or any component is exceeded, utilize proper respiratory protection program guidelines (see OSHA 1910.134 and American National Standard ANSI Z88.2) Use a properly fitted, NIOSH/MSHA air-purifying or air-fed respirator with organic vapor cartridge and dust/mist filter in compliance with the above mentioned standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: white opaque liquid
 Odor: near odorless
 Odor threshold: not available
 pH: not applicable
 Melting Point/Freezing Point: N.D.
 Initial Boiling Point/Range: not applicable
 Flash Pt: not flammable
 Evaporation Rate: N.D. (butyl acetate=1)
 Lower explosive limits: not applicable
 Upper explosive limits: not applicable
 Vapor Pressure: N.D.
 Vapor Density: N.D. (air=1)
 Relative Density: .997
 Solubility in water: Emulsifies
 Partition coefficient: not applicable
 Auto ignition temp: not applicable
 Decomposition Temp: not available
 Viscosity: pourable liquid, water thin viscosity

10. STABILITY AND REACTIVITY

Reactivity: No data available

Chemical Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: No data available

Conditions to Avoid: elevated temperatures

Incompatible Materials: Oxidizing materials

Hazardous Decomposition Products: Carbon monoxide and Carbon Dioxide, irritating vapors.

11. TOXICOLOGICAL INFORMATION

Acute toxicity: no components found or no data available

Skin corrosion irritation: not classified,

Serious Eye damage: classified 2B

Sensitization: Not classified,

Mutagenicity: Not classified,

Carcinogenicity: Not classified

Reproductive Toxicity: No data available

Teratogenicity: No data Available

Specific target Organ Toxicity (single exposure)

Not classified

Specific target Organ Toxicity (repeated exposure):

<u>Name</u>	<u>category</u>	<u>route of exposure</u>	<u>target organs</u>
Not classified			

Aspiration Hazard:

No Data

Information on the likely routes of exposure:

Ingestion: May be harmful if swallowed.

Inhalation: Do not breathe vapors or mists.

Skin: Avoid contact with skin. Wash skin with soap and water for 15 minutes.

Eye: Causes serious eye irritation

Symptoms related to the physical, chemical and toxicological characteristics

Ingestion: See section iv, most important symptoms and effects, acute and delayed.

Inhalation: See section iv, most important symptoms and effects, acute and delayed.

Skin: See section iv, most important symptoms and effects, acute and delayed.

Eye: See section iv, most important symptoms and effects, acute and delayed.

Delayed and immediate effects and also chronic effects from short and long term exposure.

General: Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis

Carcinogenicity: no known significant effects or critical hazards. Not classifiable.

Numerical measures of Toxicity

Not Available

12. ECOLOGICAL INFORMATION**Toxicity:**

No data

Bioaccumulation Potential:

No data

Mobility in Soil:

No data

Other adverse Effects:

No known significant effects or critical hazards

13. DISPOSAL CONSIDERATIONS

Dispose in accordance with applicable federal, state and local regulations.

14. TRANSPORTATION INFORMATION

DOT: NOT REGULATED
IATA: NOT REGULATED
IMDG: NOT REGULATED

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS: All ingredients are listed or exempted with TSCA.

SARA 302/304: No products were found.

SARA 311/312: Acute,

SARA 313: No products found

California Prop 65: No products found

16. OTHER INFORMATION

HMIS RATING: HEALTH (1) FIRE (0) REACTIVITY (0)
4=EXTREME, 3=HIGH, 2=MODERATE, 1=SLIGHT, 0=INSIGNIFICANT

NOTICE TO READER:

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. The information on this sds was obtained from sources which we believe are reliable. However, the information is provided without any warranty, expressed or implied, regarding its correctness. Users are advised to confirm in advance of need, that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the sds. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed.



Sentinel 24-7 Zero White Mold & Mildew Resistant Coating

Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 1/12/2016

Supersedes: All previous versions

Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name : Sentinel 24-7 Zero White Mold & Mildew Resistant Coating with Antimicrobial Product Protection

Product form : Mixture

1.2. Relevant identified uses of the substance or mixture and uses advised against

Uses of the substance/Mixture : Antimicrobial coating for interior use

1.3. Details of the supplier of the safety data sheet

Sentinel Products Inc.
8901 Wyoming Avenue North
Brooklyn Park, MN 55445
Phone: (763) 571-0630
Toll-free: (800)-373-0633
www.senpro.com

1.4. Emergency telephone number

Emergency number : 1-866-359-5661

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Eye Irritation 2B H320
Carcinogenicity 2 H351
Reproductive Toxicity 2 H361

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :



GHS08

Signal word (GHS-US) : **Warning**

Hazard statements (GHS-US) : H320 - Causes eye irritation.
H351 - Suspected of causing cancer.
H361 - Suspected of damaging fertility or the unborn child.

Precautionary statements (GHS-US) : P264 - Wash hands thoroughly after handling.
P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P280 - Wear eye protection, protective clothing, protective gloves, face protection.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P308+P313 - If exposed or concerned: Get medical advice.
P405 - Store locked up.
P501 - Dispose of contents/container to licensed waste handling facility.

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%
Titanium dioxide	(CAS No) 13463-67-7	10 - 30
Zinc pyrithione	(CAS No) 13463-41-7	Proprietary*

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*The specific chemical identity and exact percentage of composition has been withheld as a trade secret

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : If exposed or concerned, get medical attention/advice. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before re-use. Never give anything to an unconscious person.
- First-aid measures after inhalation : IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if breathing is affected. If breathing is difficult, supply oxygen.
- First-aid measures after skin contact : IF ON SKIN (or clothing): Remove affected clothing and wash all exposed skin with water for at least 15 minutes. If irritation develops or persists, get medical attention.
- First-aid measures after eye contact : IF IN EYES: Immediately flush with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do so. If pain, blinking, or irritation develops or persists, get medical attention. Continue rinsing.
- First-aid measures after ingestion : IF SWALLOWED: Rinse mouth thoroughly. Do not induce vomiting without advice from poison control center or medical professional. Seek medical attention.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after inhalation : May cause respiratory irritation.
- Symptoms/injuries after skin contact : May cause skin irritation.
- Symptoms/injuries after eye contact : Direct contact with the eyes is likely to be irritating.
- Symptoms/injuries after ingestion : May cause gastrointestinal irritation.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Foam. Dry powder. Carbon dioxide.
- Unsuitable extinguishing media : Water may be unsuitable as an extinguishing media, but helpful in keeping adjacent containers cool.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Not determined.
- Explosion hazard : Not determined.
- Reactivity : No data available.

5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Do not dispose of fire-fighting water in the environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : No specific emergency measures are required other than good laboratory hygiene and safety practices.

6.1.1. For non-emergency personnel

- Protective equipment : Wear Protective equipment as described in Section 8.
- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Wear suitable protective clothing, gloves and eye or face protection. Approved supplied-air respirator, in case of emergency.

6.2. Environmental precautions

Avoid release to the environment. Keep out of sewer, streams, lakes, and other groundwaters.

6.3. Methods and material for containment and cleaning up

- For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
- Methods for cleaning up : Solidify spills with inert solids, such as clay, vermiculite or diatomaceous earth as soon as possible. Place in a suitable container for disposal in accordance with the waste regulations (see Section 13).

Sentinel 24-7 Zero White Mold & Mildew Resistant Coating

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Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Keep container closed when not in use.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Does not require any specific or particular technical measures.
Storage conditions : Store in dry, well-ventilated area. Keep container tightly closed in original container protected from sunlight. Keep from freezing. Store locked up.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Titanium Dioxide (13463-67-7)	
Remark (ACGIH)	TWA - 10 mg/m ³
Remark (US OSHA)	PEL - 15 mg/m ³

8.2. Exposure controls

Appropriate engineering controls : Provide adequate general and local exhaust ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Ensure adequate ventilation, especially in confined areas.

Personal protective equipment : Gloves. Wear protective clothing. Protective goggles.



Hand protection : Use gloves chemically resistant to this material when prolonged or repeated contact could occur. Gloves should be classified under Standard EN 374 or ASTM F1296. Suggested glove materials are: Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, PVC or vinyl. . Suitable gloves for this specific application can be recommended by the glove supplier.

Eye protection : Use eye protection suitable to the environment. Avoid direct contact with eyes.

Skin and body protection : Wear long sleeves, and chemically impervious PPE/coveralls to minimize bodily exposure.

Respiratory protection : Where vapor, mist, or dust exceed PELs or other applicable OELs, use NIOSH-approved respiratory protective equipment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Color : White, dries White.
Odor : Slight latex
Odor Threshold : No data available
pH : 9.8
Relative evaporation rate (butylacetate=1) : <1, water
Melting point : No data available
Freezing point : 0 °C (32 °F)
Boiling point : 100 °C (212 °F)
Flash point : > 93 °C (calculated)
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Flammability (solid, gas) : No data available
Vapour pressure : No data available
Relative vapour density at 20 °C : No data available
Relative density : 1.2
Solubility : No data available
Log Pow : No data available

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Log Kow	: No data available
Viscosity, kinematic	: 102 KU
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

Excessive heat which may cause the closed container to rupture. Excessive cold which may cause the closed container to rupture.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

Thermal decomposition may yield monomers, carbon monoxide, carbon dioxide, nitrogen oxides (NO_x), and Sulphur Dioxide (SO₂).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: Not classified - Based on ingredients and their concentrations in the product, the product is not classified as acutely toxic.
Skin corrosion/irritation	: Not classified - Based on ingredients and their concentrations in the product, the product is not classified for skin irritation.
Serious eye damage/irritation	: No data for the mixture. Based on ingredients and their concentrations in the product, the product is classified as Category 2B: causes eye irritation.
Respiratory or skin sensitisation	: Not classified - Based on ingredients and their concentrations in the product, the product is not classified for respiratory or skin sensitization.
Germ cell mutagenicity	: Not classified - Based on ingredients and their concentrations in the product, the product is not classified for germ cell mutagenicity.
Carcinogenicity	: No data for the mixture. Based on ingredients and their concentrations in the product, the product is classified as Category 2: Suspected of causing cancer. IARC: Titanium Dioxide: Group 2B: possibly carcinogenic to humans.
Reproductive toxicity	: No data for the mixture. Based on ingredients and their concentrations in the product, the product is classified as Category 2: Suspected of damaging fertility or the unborn child.
Specific target organ toxicity (single exposure)	: Not classified - Based on ingredients and their concentrations in the product, the product is not classified for STOT - single exposure.
Specific target organ toxicity (repeated exposure)	: Not classified - Based on ingredients and their concentrations in the product, the product is not classified for STOT - repeated exposure.
Aspiration hazard	: No data for the mixture. Based on ingredients and their concentrations in the product, and the viscosity of the product, the product is not classified as an aspiration hazard.
Symptoms/injuries after inhalation	: No data for the mixture.
Symptoms/injuries after skin contact	: No data for the mixture.
Symptoms/injuries after eye contact	: No data for the mixture. Based on ingredients and their concentrations in the product, the product causes eye irritation.
Symptoms/injuries after ingestion	: No data for the mixture.

Additional information: No data is available for the mixture. The information shown is based on the profiles of the ingredients and their concentrations in the product.

Sentinel 24-7 Zero White Mold & Mildew Resistant Coating

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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Aquatic toxicity rating not determined. All possible measures should be taken to prevent release into the environment.

12.2. Persistence and degradability

Sentinel 24-7 Zero White Mold & Mildew Resistant Coating

Persistence and degradability	Not established.
-------------------------------	------------------

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Do not dump in any sewers, on the ground or into any body of water.

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

In accordance with DOT

Not hazardous for transport

Additional information

Other information : No supplementary information available.

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

Sentinel 24-7 Zero White Mold & Mildew Resistant Coating

All chemical substances in this product are listed in the EPA (Environment Protection Agency) TSCA (Toxic Substances Control Act) Inventory

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 313: Zinc compounds.

15.2. International regulations

CANADA

No additional information available.

15.3. US State regulations

Component	CAS #	State
Ethylene oxide	75-21-8	California, Massachusetts, New Jersey, Pennsylvania, Rhode Island
Titanium Dioxide	13463-67-7	New Jersey, Pennsylvania, Rhode Island
Titanium dioxide and silicon dioxide, amorphous	13463-67-7 and 7631-86-9	New Jersey, Pennsylvania
Zinc oxide fume	1314-13-2	Massachusetts
Zinc compounds; zinc oxide	13463-41-7, 1314-13-2	New Jersey, Pennsylvania

California Proposition 65: WARNING! This product contains chemicals known to the state of California to cause cancer, birth defects, or other reproductive harm.

Sentinel 24-7 Zero White Mold & Mildew Resistant Coating

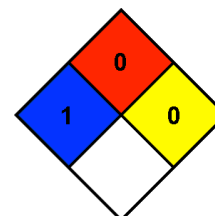
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SECTION 16: Other information

Indication of changes : Revision 1.0: - 12 January 2016 - New SDS Created.
:
Other information : Author: KAD

NFPA health hazard : 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.
NFPA fire hazard : 0 - Materials that will not burn.
NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating

Health : 1
Flammability : 0
Physical : 0
Personal Protection :

The information in this document is believed to be correct as of the date issued. However, no warranty of merchantability, fitness for any particular purpose, or any other warranty is expressed or is to be implied regarding the accuracy or completeness of this information, the results to be obtained from the use of this product or the hazards related to its use. This information and product are furnished on the condition that the person receiving them shall make his own determination as to the suitability of the product for his particular purpose and on the condition that he assume the risk of his use thereof.



Sentinel 207W Carpet & Sheet Vinyl Adhesive Remover Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Revision date: 08/04/2016 Supersedes: All previous versions Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name : Sentinel 207W Carpet & Sheet Vinyl Adhesive Remover
Product form : Mixture

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Flooring adhesive removal

1.3. Details of the supplier of the safety data sheet

Sentinel Products Inc.
8901 Wyoming Avenue North
Brooklyn Park, MN 55445
Phone: (763) 571-0630
Toll-free: (800)-373-0633
www.senpro.com

1.4. Emergency telephone number

Emergency number : 1-866-359-5661

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Acute Toxicity - Oral Category 4 H302
Skin Irritation Category 1 H314
Eye Irritation Category 1 H318

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

H302 - Harmful if swallowed
H314 - Causes severe skin burns and eye damage
H318 - Causes serious eye damage

Precautionary statements (GHS-US) :

P260 - Do not breathe dusts or mists.
P270 - Do not eat, drink or smoke when using this product.
P264 - Wash hands thoroughly after handling.
P280 - Wear eye protection, protective clothing, protective gloves.
P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P312 - Call a POISON CENTER or doctor/physician if you feel unwell.
P303+P361+P353 - IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water/shower.
P363 - Wash contaminated clothing before reuse.
P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P310 - Immediately call a POISON CENTER or doctor/physician.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
P310 - Immediately call a POISON CENTER or doctor/physician.
P405 - Store locked up
P501 - Dispose of contents/container to licensed waste handling facility in accordance with local/regional/national regulations.

2.3. Other hazards

No additional information available

Sentinel 207W Carpet & Sheet Vinyl Adhesive Remover

Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

2.4. Unknown acute toxicity (GHS-US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%
Benzyl Alcohol	(CAS No) 100-51-6	Proprietary*
2-(2-butoxyethoxy)ethanol	(CAS No) 112-34-5	Proprietary*
Surfactant	(CAS No) Proprietary*	Proprietary*

*The specific chemical identity and/or exact percentage of composition has been withheld as a trade secret

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a POISON CENTER or doctor/physician if you feel unwell.
- First-aid measures after skin contact : IF ON SKIN: Immediately rinse with plenty of soap and water (for at least 15 minutes). Remove contaminated clothing and shoes, wash before reuse. Seek medical advice/attention.
- First-aid measures after eye contact : IF IN EYES: Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes minimum). Remove contact lenses, if present and easy to do so. Continue rinsing. Seek medical advice/attention.
- First-aid measures after ingestion : IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries : May be fatal if swallowed and enters airways.
- Symptoms/injuries after inhalation : Inhalation in high concentrations may cause irritation of the mucous membranes. Aspiration of this material into the lungs may cause chemical pneumonia or death.
- Symptoms/injuries after skin contact : Contact likely to cause irritation. Persons with a pre-existing skin condition may be more susceptible to the effects of this product.
- Symptoms/injuries after eye contact : Direct contact with the eyes is likely to be irritating.
- Symptoms/injuries after ingestion : May be irritating to the mucous membranes.
- Chronic symptoms : No data available.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Dry chemical. Carbon dioxide. Foam.

5.2. Special hazards arising from the substance or mixture

- Explosion hazard : Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.
- Reactivity : No dangerous reactions known under normal conditions of use.

5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Do not dispose of fire-fighting water in the environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Evacuate area. Keep upwind. Ventilate area. Spill should be handled by trained clean-up crews properly equipped with respiratory equipment and chemical protective gear (see Section 8).

Sentinel 207W Carpet & Sheet Vinyl Adhesive Remover

Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

6.1.1. For non-emergency personnel

Protective equipment : Wear Protective equipment as described in Section 8.
Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Wear suitable protective clothing, gloves and eye or face protection. Approved supplied-air respirator, in case of emergency.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Stop leak at source if this can be done safely. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Ventilate area. Foam may be used to suppress vapors.
Methods for cleaning up : Pump liquid into DOT approved drums for disposal. Soak up remaining liquid with inert solids, such as clay or diatomaceous earth as soon as possible. Place in a suitable container for disposal in accordance with the waste regulations (see Section 13). Wash residue with water. Keep concentrate and wash water from entering sewers or waterways.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Do not handle until all safety precautions have been read and understood. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Do not breathe mists.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Heat sources. Direct sunlight.
Keep container closed when not in use. Do not allow product to freeze as container may fail.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Benzyl Alcohol (100-51-6)	
Remark (ACGIH)	OELs not established
Remark (US OSHA)	OELs not established

2-(2-butoxyethoxy)ethanol (112-34-5)	
Remark (ACGIH)	TWA - 10 ppm
Remark (US OSHA)	OELs not established

Surfactant (Proprietary*)	
Remark (ACGIH)	OELs not established
Remark (US OSHA)	OELs not established

8.2. Exposure controls

Appropriate engineering controls : Ensure adequate ventilation, especially in confined areas.

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Personal protective equipment : Gloves. Protective goggles. Respiratory protection of the dependent type may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.



Hand protection : Use gloves chemically resistant to this material when prolonged or repeated contact could occur. Gloves should be classified under Standard EN 374 or ASTM F1296. Suggested glove materials are: Natural rubber ("latex"), Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, PVC or vinyl.

Eye protection : Eye protection, including both chemical splash goggles and face shield, must be worn when possibility exists for eye contact due to spraying liquid or airborne particles.

Skin and body protection : Wear suitable protective clothing as desired.

Respiratory protection : An approved organic vapor respirator/supplied air or self-contained breathing apparatus must be used when vapor concentration exceeds applicable exposure limits.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : Clear
Color : None to amber
Odor : Sharp
Odor Threshold : No data available
pH : 8.0 - 9.0
Relative evaporation rate (butyl acetate=1) : No data available
Melting point : No data available
Freezing point : No data available
Boiling point : >94 °C (200 °F)
Flash point : >94 °C (200 °F) Method: TCC
Self ignition temperature : No data available
Decomposition temperature : No data available
Flammability (solid, gas) : No data available
Vapor pressure : No data available
Relative vapor density at 20 °C : No data available
Relative density : No data available
Solubility : No data available
Log Pow : No data available
Log Kow : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidizing properties : No data available
Explosive limits : No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of hazardous reactions

None known.

Sentinel 207W Carpet & Sheet Vinyl Adhesive Remover

Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

10.4. Conditions to avoid

Sparks. Heat. Open flame. Freezing.

10.5. Incompatible materials

Strong acids. Oxidizers.

10.6. Hazardous decomposition products

Thermal decomposition generates : Oxides of carbon.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Oral - Category 4 - Harmful if swallowed

Benzyl Alcohol (100-51-6)	
LD50 oral	> 1200 mg/kg
LD50 dermal	> 2000 mg/kg

2-(2-butoxyethoxy)ethanol (112-34-5)	
LD50 oral rat	> 4500 mg/kg
LD50 dermal rabbit	> 2500 mg/kg

Surfactant (Proprietary*)	
LD50 oral rat	> 1400 mg/kg
LD50 dermal rabbit	> 2000 mg/kg

Skin corrosion/irritation : Skin Irritant Category 1 - Causes severe skin burns and eye damage

Serious eye damage/irritation : Eye Irritant Category 1 - Causes serious eye damage

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : May be fatal if swallowed and enters airways.

Symptoms/injuries after inhalation : Inhalation in high concentrations may cause irritation of the mucous membranes. Aspiration of this material into the lungs may cause chemical pneumonia or death.

Symptoms/injuries after skin contact : Contact likely to cause irritation. Persons with a pre-existing skin condition may be more susceptible to the effects of this product.

Symptoms/injuries after eye contact : Direct contact with the eyes is likely to be irritating.

Symptoms/injuries after ingestion : May be irritating to the mucous membranes.

Chronic symptoms : No data available.

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

Sentinel 207W Carpet & Sheet Vinyl Adhesive Remover

Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Do not discharge to public wastewater systems without permit of pollution control authorities. No discharge to surface waters is allowed without an NPDES permit.

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Do not allow the product to be released into the environment.

SECTION 14: Transport information

In accordance with DOT

Transport document description : Cleaning Compound
Department of Transportation (DOT) Hazard Classes : Not Regulated

Transport by sea

No additional information available

Air transport

No additional information available

In accordance with ADR / RID / IMDG / IATA / ADN

SECTION 15: Regulatory information

15.1. US Federal regulations

Sentinel 207W Carpet & Sheet Vinyl Adhesive Remover

All chemical substances in this product are listed or exempt from listing in the EPA (Environmental Protection Agency) TSCA (Toxic Substances Control Act) Inventory

SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
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Benzyl Alcohol (100-51-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

2-(2-butoxyethoxy)ethanol (112-34-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Surfactant (Proprietary*)

Components Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

2-(2-butoxyethoxy)ethanol (112-34-5)

Listed on the Canadian DSL (Domestic Substances List) inventory.

Surfactant (Proprietary*)

Listed on the Canadian DSL (Domestic Substances List) inventory.

No additional information available

15.2.2. National regulations

2-(2-butoxyethoxy)ethanol (112-34-5)

Listed on Inventory of Existing Chemical Substances (IECSC)
Listed on the AICS (the Australian Inventory of Chemical Substances)
Listed on the Japanese ENCS (Existing & New Chemicals Substances) inventory.
Listed on the Korean ECL (Existing Chemical List) inventory.
Listed on the Philippines CCS (Chemicals & Chemical Substances) inventory.

Sentinel 207W Carpet & Sheet Vinyl Adhesive Remover

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Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Surfactant (Proprietary*)

Listed on Inventory of Existing Chemical Substances (IECSC)
Listed on the AICS (the Australian Inventory of Chemical Substances)
Listed on the Japanese ENCS (Existing & New Chemicals Substances) inventory.
Listed on the Korean ECL (Existing Chemical List) inventory.
Listed on the Philippines CCS (Chemicals & Chemical Substances) inventory.

15.3. US State regulations

California Proposition 65

This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm

SECTION 16: Other information

Indication of changes : Revision 1.0 - 04 August 2016 - New SDS created

Other information : Author. KAD

NFPA health hazard : 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

NFPA fire hazard : 1 - Must be preheated before ignition can occur. Materials in this degree require considerable preheating, under all ambient temperature condition, before ignition and combustion can occur.

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating

Health : 1

Flammability : 1

Physical : 0

Personal Protection :

The information in this document is believed to be correct as of the date issued. However, no warranty of merchantability, fitness for any particular purpose, or any other warranty is expressed or is to be implied regarding the accuracy or completeness of this information, the results to be obtained from the use of this product or the hazards related to its use. This information and product are furnished on the condition that the person receiving them shall make his own determination as to the suitability of the product for his particular purpose and on the condition that he assume the risk of his use thereof.



Sentinel 805 Envirotowels

Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date: 07/08/2015

Supersedes: All previous versions

Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name : Sentinel 805 Envirotowels
*This Safety Data Sheet is provided for the liquid portion of this product
Product form : Mixture

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Lead Dust Cleanup

1.3. Details of the supplier of the safety data sheet

Sentinel Products Inc.
8901 Wyoming Avenue North
Brooklyn Park, MN 55445
Phone: (763) 571-0630
Toll-free: (800)-373-0633
www.senpro.com

1.4. Emergency telephone number

Emergency number : 1-866-359-5661

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Skin Irritation Category 2 H315
Eye Irritation Category 1 H318

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US)



GHS07

GHS05

Signal word (GHS-US)

: **Danger**

Hazard statements (GHS-US)

: H315 - Causes skin irritation
H318 - Causes serious eye damage

Precautionary statements (GHS-US)

: P264 - Wash hands thoroughly after handling.
P280 - Wear eye protection, protective clothing, protective gloves
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P362 - Take off contaminated clothing and wash before reuse.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
P310 - Immediately call a POISON CENTER or doctor/physician.
P370+P378 - In case of fire: Use dry chemical, foam, CO2 for extinction.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P405 - Store locked up
P501 - Dispose of contents/container to licensed waste handling facility

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Sentinel 805 Envirotowels

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Name	Product identifier	%
Surfactant Blend	(CAS No) Proprietary*	Proprietary*
Trisodium Phosphate Anhydrous	(CAS No) 7601-54-9	Proprietary*
Sodium Metasilicate Pentahydrate	(CAS No) 10213-79-3	Proprietary*

*The component information and exact percentage of composition has been withheld as a trade secret

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
- First-aid measures after skin contact : IF ON SKIN: Immediately rinse with plenty of soap and water (for at least 15 minutes). Remove contaminated clothing and wash before reuse. If skin irritation or redness occurs, get medical advice/attention.
- First-aid measures after eye contact : IF IN EYES: Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes minimum). Remove contact lenses, if present and easy to do so. Continue rinsing. If eye irritation occurs, get medical advice/attention.
- First-aid measures after ingestion : IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries : May be fatal if swallowed and enters airways.
- Symptoms/injuries after inhalation : Inhalation in high concentrations may cause irritation of the mucous membranes. May cause a headache. Aspiration of this material into the lungs may cause chemical pneumonia or death.
- Symptoms/injuries after skin contact : Contact may cause irritation. Persons with pre-existing skin disorders may be more susceptible to the effects of this product.
- Symptoms/injuries after eye contact : Direct contact with the eyes is likely to be irritating. May cause burns and possible corneal damage.
- Symptoms/injuries after ingestion : May be irritating to the mucous membranes.
- Chronic symptoms : No data available.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Dry chemical. Carbon dioxide. Foam.

5.2. Special hazards arising from the substance or mixture

- Explosion hazard : Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.
- Reactivity : No dangerous reactions known under normal conditions of use.

5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Do not dispose of fire-fighting water in the environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Mop up as much as possible, then flush residue with a large volume of water.

6.1.1. For non-emergency personnel

Protective equipment : Wear Protective equipment as described in Section 8.

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Wear suitable protective clothing, gloves and eye or face protection. Approved supplied-air respirator, in case of emergency.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

Sentinel 805 Envirotowels

Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

6.3. Methods and material for containment and cleaning up

- For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
- Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Place in a suitable container for disposal in accordance with the waste regulations (see Section 13).

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Do not handle until all safety precautions have been read and understood. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not breathe mists.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Heat sources. Keep container closed when not in use.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Surfactant Blend	
Remark (ACGIH)	OELs not established
Remark (US OSHA)	OELs not established

Trisodium Phosphate Anhydrous (7601-54-9)*	
Remark (ACGIH)	Pertaining to dusts: 10 mg/m ³ (inhalable) 8-hr TWA, 3 mg/m ³ (respirable) 8-hr TWA
Remark (US OSHA)	Pertaining to dusts: 15 mg/m ³ (total dust) 8-hr TWA, 5 mg/m ³ (respirable) 8-hr TWA
	*Subject to the reporting requirements of SARA 312. Trisodium Phosphate at 100% in powder form is a nuisance dust.

Sodium Metasilicate Pentahydrate (10213-79-3)	
Remark (ACGIH)	OELs not established
Remark (US OSHA)	OELs not established
	An exposure limit of 2 mg/m ³ (15 min TWA) is recommended by analogy with sodium hydroxide.

8.2. Exposure controls

- Appropriate engineering controls : Ensure adequate ventilation. A source of clean water should be available in the work area for flushing eyes and skin.
- Personal protective equipment : Gloves. Protective clothing as needed. Protective goggles.



- Hand protection : Use gloves chemically resistant to this material when prolonged or repeated contact could occur. Gloves should be classified under Standard EN 374 or ASTM F1296. Suggested glove materials are: Natural rubber ("latex"), Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, PVC or vinyl.
- Eye protection : Eye protection must be worn when possibility exists for eye contact due to spraying liquid or airborne particles.
- Skin and body protection : Wear suitable protective clothing as needed.

Sentinel 805 Envirotowels

Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Respiratory protection : None.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : Clear
Color : None
Odor : Slight odor
Odor Threshold : No data available
pH : No data available
Relative evaporation rate (butyl acetate=1) : Slower than ether
Melting point : No data available
Freezing point : No data available
Boiling point : >100 °C (212 °F)
Flash point : None to boiling
Self ignition temperature : No data available
Decomposition temperature : No data available
Flammability (solid, gas) : No data available
Vapor pressure : No data available
Relative vapor density at 20 °C : No data available
Relative density : No data available
Solubility : No data available
Log Pow : No data available
Log Kow : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidizing properties : No data available
Explosive limits : No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

Thermal decomposition generates : Oxides of carbon and phosphorous.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Surfactant Blend (Alcohol ethoxylate, 9002-92-0)

LD50 oral rat : 1 g/kg

Sentinel 805 Envirotowels

Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Trisodium Phosphate Anhydrous (7601-54-9)	
LD50 oral rat	> 4100 mg/kg
LD50 dermal rabbit	> 7900 mg/kg
Eye Irritation - Rabbit	Corrosive
Skin Irritation - Rabbit	2.2/8.0 (24-hr exp.); slightly irritating

Sodium Metasilicate Pentahydrate (10213-79-3)	
LD50 oral rat	> 1150 mg/kg
LD50 dermal rAT	> 5000 mg/kg

Skin corrosion/irritation	: Skin Irritant Category 2
Serious eye damage/irritation	: Eye Irritant Category 1
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: May be fatal if swallowed and enters airways.
Symptoms/injuries after inhalation	: Inhalation in high concentrations may cause irritation of the mucous membranes. May cause a headache. Aspiration of this material into the lungs may cause chemical pneumonia or death.
Symptoms/injuries after skin contact	: Contact may cause irritation. Persons with pre-existing skin disorders may be more susceptible to the effects of this product.
Symptoms/injuries after eye contact	: Direct contact with the eyes is likely to be irritating. May cause burns and possible corneal damage.
Symptoms/injuries after ingestion	: May be irritating to the mucous membranes.
Chronic symptoms	: No data available.

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Do not discharge to public wastewater systems without permit of pollution control authorities. No discharge to surface waters is allowed without an NPDES permit.

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Do not allow the product to be released into the environment.

SECTION 14: Transport information

In accordance with DOT

Transport document description : Cleaning Compound

Sentinel 805 Envirotowels

Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Department of Transportation (DOT) Hazard Classes : Not Regulated

Transport by sea

No additional information available

Air transport

No additional information available

In accordance with ADR / RID / IMDG / IATA / ADN

SECTION 15: Regulatory information

15.1. US Federal regulations

Sentinel 805 Envirotowels

All chemical substances in this product are listed in the EPA (Environmental Protection Agency) TSCA (Toxic Substances Control Act) Inventory

SARA Section 311/312 Hazard Classes : Immediate (acute) health hazard

Surfactant Blend (Alcohol ethoxylate, 9002-92-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Trisodium Phosphate Anhydrous (7601-54-9)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Sodium Metasilicate Pentahydrate (10213-79-3)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

Surfactant Blend (Alcohol ethoxylate, 9002-92-0)

Listed on the Canadian DSL (Domestic Substances List) inventory.

Trisodium Phosphate Anhydrous (7601-54-9)

Listed on the Canadian DSL (Domestic Substances List) inventory.

Sodium Metasilicate Pentahydrate (10213-79-3)

Listed on the Canadian DSL (Domestic Substances List) inventory.

No additional information available

15.2.2. National regulations

Surfactant Blend (Alcohol ethoxylate, 9002-92-0)

Listed on Inventory of Existing Chemical Substances (IECSC)

Listed on the AICS (the Australian Inventory of Chemical Substances)

Listed on the Korean ECL (Existing Chemical List) inventory.

Listed on the Philippines CCS (Chemicals & Chemical Substances) inventory.

Trisodium Phosphate Anhydrous (7601-54-9)

Listed on Inventory of Existing Chemical Substances (IECSC)

Listed on the AICS (the Australian Inventory of Chemical Substances)

Listed on the Japanese ENCS (Existing & New Chemicals Substances) inventory.

Listed on the Korean ECL (Existing Chemical List) inventory.

Listed on the Philippines CCS (Chemicals & Chemical Substances) inventory.

Sodium Metasilicate Pentahydrate (10213-79-3)

Listed on the AICS (the Australian Inventory of Chemical Substances)

15.3. US State regulations

California Proposition 65

This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm

Sentinel 805 Envirotowels

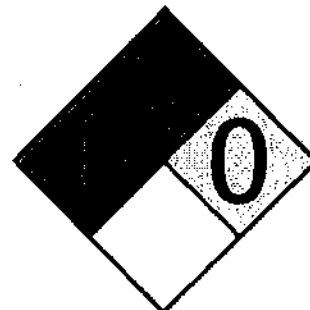
Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 16: Other information

Indication of changes : Revision 1.0 – 07/08/2015 - New SDS Created.
Other information : Author. KAD

NFPA health hazard : 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.
NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions.
NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating

Health : 1
Flammability : 0
Physical : 0
Personal Protection :

The information in this document is believed to be correct as of the date issued. However, no warranty of merchantability, fitness for any particular purpose, or any other warranty is expressed or is to be implied regarding the accuracy or completeness of this information, the results to be obtained from the use of this product or the hazards related to its use. This information and product are furnished on the condition that the person receiving them shall make his own determination as to the suitability of the product for his particular purpose and on the condition that he assume the risk of his use thereof.



Sentinel 805NP* Envirotowels *Non-Phosphate

Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 12/02/2015

Supersedes: All previous versions

Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name : Sentinel 805NP Envirotowels (Non-Phosphate)
*This Safety Data Sheet is provided for the liquid portion of this product

Product form : Mixture

1.2. Relevant identified uses of the substance or mixture and uses advised against

Uses of the substance/Mixture : Presoaked disposable towels for Lead Dust Cleanup

1.3. Details of the supplier of the safety data sheet

Sentinel Products Inc.
8901 Wyoming Avenue North
Brooklyn Park, MN 55445
Phone: (763) 571-0630
Toll-free: (800)-373-0633
www.senpro.com

1.4. Emergency telephone number

Emergency number : 1-866-359-5661

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Eye Irritation 2 H319

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :



GHS07

Signal word (GHS-US) : **Warning**

Hazard statements (GHS-US) : H319 - Causes serious eye irritation

Precautionary statements (GHS-US) : P264 - Wash hands thoroughly after handling.
P280 - Wear eye protection, protective clothing, protective gloves.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P501 - Dispose of contents/container to licensed waste handling facility.

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%
Surfactant	(CAS No) Proprietary*	Proprietary*
Citric Acid	(CAS No) 77-92-9	Proprietary*

*The specific chemical identity and exact percentage of composition has been withheld as a trade secret.

Sentinel 805NP* Envirotowels *Non-Phosphate

Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : If exposed or concerned, get medical attention/advice. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before re-use. Never give anything to an unconscious person.
- First-aid measures after inhalation : IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if breathing is affected. If breathing is difficult, supply oxygen.
- First-aid measures after skin contact : IF ON SKIN (or clothing): Remove affected clothing and wash all exposed skin with water for at least 15 minutes. If irritation develops or persists, get medical attention.
- First-aid measures after eye contact : IF IN EYES: Immediately flush with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do so. If pain, blinking, or irritation develops or persists, get medical attention. Continue rinsing.
- First-aid measures after ingestion : IF SWALLOWED: rinse mouth thoroughly. Do not induce vomiting without advice from poison control center or medical professional. Get medical attention if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after inhalation : May cause respiratory irritation.
- Symptoms/injuries after skin contact : May cause skin irritation. Persons with pre-existing skin disorders may be more susceptible to the effects of this product.
- Symptoms/injuries after eye contact : Direct contact with the eyes is likely to be irritating.
- Symptoms/injuries after ingestion : May cause gastrointestinal irritation.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Foam. Dry powder. Carbon dioxide.
- Unsuitable extinguishing media : Water may be unsuitable as an extinguishing media, but helpful in keeping adjacent containers cool.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Not determined.
- Explosion hazard : Not determined.
- Reactivity : No data available.

5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Do not dispose of fire-fighting water in the environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Mop up as much as possible, then flush residue with a large volume of water.

6.1.1. For non-emergency personnel

- Protective equipment : Wear Protective equipment as described in Section 8.
- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Wear suitable protective clothing, gloves and eye or face protection. Approved supplied-air respirator, in case of emergency.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

- For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
- Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Place in a suitable container for disposal in accordance with the waste regulations (see Section 13).

Sentinel 805NP* Envirotowels *Non-Phosphate

Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Keep container closed when not in use.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Does not require any specific or particular technical measures.

Storage conditions : Store in dry, well-ventilated area. Keep container tightly closed in a cool place. Do not allow to freeze as container may burst.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Surfactant (Proprietary)	
Remark (ACGIH)	OELs not established
Remark (US OSHA)	OELs not established

Citric Acid (77-92-9)	
Remark (ACGIH)	OELs not established
Remark (US OSHA)	OELs not established

8.2. Exposure controls

Appropriate engineering controls : Provide adequate general and local exhaust ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof equipment with flammable materials. Ensure adequate ventilation, especially in confined areas.

Personal protective equipment : Gloves. Protective goggles.



Hand protection : Use gloves chemically resistant to this material when prolonged or repeated contact could occur. Gloves should be classified under Standard EN 374 or ASTM F1296. Suggested glove materials are: Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, PVC or vinyl. . Suitable gloves for this specific application can be recommended by the glove supplier.

Eye protection : Use eye protection suitable to the environment. Avoid direct contact with eyes.

Skin and body protection : Wear protective clothing as desired.

Respiratory protection : Use NIOSH-approved dust/particulate respirator. Where vapor, mist, or dust exceed PELs or other applicable OELs, use NIOSH-approved respiratory protective equipment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Color : None
Odor : Slight
Odor Threshold : No data available
pH : No data available
Relative evaporation rate (butylacetate=1) : No data available
Relative evaporation rate (ether=1) : < 1, Slower than ether
Melting point : No data available
Freezing point : 0 °C (32 °F)

Sentinel 805NP* Envirotowels *Non-Phosphate

Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Boiling point	: 100 °C (212 °F)
Flash point	: None to boiling
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: Complete solubility in water.
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

Freezing conditions.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

Carbon dioxide and some oxides of nitrogen.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Surfactant (Proprietary)	
LD50 oral rat	= 1 g/kg
Citric Acid (77-92-9)	
LD50 oral	> 5400 mg/kg
LD50 dermal	> 11700 mg/kg

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Likely to cause eye damage
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified

Sentinel 805NP* Envirotowels *Non-Phosphate

Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Symptoms/injuries after inhalation	: May cause respiratory irritation.
Symptoms/injuries after skin contact	: May cause skin irritation. Persons with pre-existing skin disorders may be more susceptible to the effects of this product.
Symptoms/injuries after eye contact	: Direct contact with the eyes is likely to be irritating.
Symptoms/injuries after ingestion	: May cause gastrointestinal irritation.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Aquatic toxicity rating not determined. All possible measures should be taken to prevent release into the environment.

12.2. Persistence and degradability

Sentinel 805NP Envirowash

Persistence and degradability	Not established.
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12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Do not discharge to public wastewater systems without permit of pollution control authorities. No discharge to surface waters is allowed without an NPDES permit.

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

In accordance with DOT

Not hazardous for transport

Additional information

Other information : No supplementary information available.

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

Sentinel 805NP Envirowash

All chemical substances in this product are listed in the EPA (Environment Protection Agency) TSCA (Toxic Substances Control Act) Inventory

SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
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15.2. International regulations

CANADA

Surfactant (Proprietary)

Listed on the Canadian DSL (Domestic Substances List) inventory.

Sentinel 805NP* Envirotowels *Non-Phosphate

Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

15.2.2. National regulations

Surfactant (Proprietary)

Listed on Inventory of Existing Chemical Substances (IECSC)
Listed on European Inventory of Existing Chemical Substances (EINECS)
Listed on the AICS (the Australian Inventory of Chemical Substances)
Listed on the Korean ECL (Existing Chemical List) inventory.
Listed on the Philippines CCS (Chemicals & Chemical Substances) inventory.

15.3. US State regulations

This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm

Triethanolamine (102-71-6)

U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

Indication of changes : Revision 1.0: - 02 December 2015 - New SDS Created.

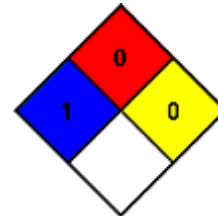
:

Other information : Author: KAD

NFPA health hazard : 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

NFPA fire hazard : 0 - Materials that will not burn.

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating

Health : 1

Flammability : 0

Physical : 0

Personal Protection :

The information in this document is believed to be correct as of the date issued. However, no warranty of merchantability, fitness for any particular purpose, or any other warranty is expressed or is to be implied regarding the accuracy or completeness of this information, the results to be obtained from the use of this product or the hazards related to its use. This information and product are furnished on the condition that the person receiving them shall make his own determination as to the suitability of the product for his particular purpose and on the condition that he assume the risk of his use thereof.



Sentinel 626 Carpet Adhesive Remover (VOC Compliant)

Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date: 02/27/2018

Supersedes: All previous versions

Version: 1.3

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name : Sentinel 626 Carpet Adhesive Remover
Product form : Mixture

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Flooring adhesive removal

1.3. Details of the supplier of the safety data sheet

Sentinel Products Inc.
8901 Wyoming Avenue North
Brooklyn Park, MN 55445
Phone: (763) 571-0630
Toll-free: (800)-373-0633
www.senpro.com

1.4. Emergency telephone number

Emergency number : 1-866-359-5661

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Skin Irritation Category 2 H315
Eye Irritation Category 1 H318

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :



GHS05

Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

H315 - Causes skin irritation
H318 - Causes serious eye damage

Precautionary statements (GHS-US) :

P264 - Wash hands thoroughly after handling.
P280 - Wear eye protection, protective clothing, protective gloves
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P362 - Take off contaminated clothing and wash before reuse.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
P310 - Immediately call a POISON CENTER or doctor/physician.
P370+P378 - In case of fire: Use dry chemical, foam, CO2 for extinction.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P405 - Store locked up
P501 - Dispose of contents/container to licensed waste handling facility

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Sentinel 626 Carpet Adhesive Remover (VOC Compliant) Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Name	Product identifier	%
Water	(CAS No) 7732-18-5	Proprietary*
2-aminoethanol	(CAS No) 141-43-5	Proprietary*
2-(2-butoxyethoxy)ethanol	(CAS No) 112-34-5	Proprietary*
Surfactant	(CAS No) Proprietary*	Proprietary*

*The exact percentage of composition has been withheld as a trade secret

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
- First-aid measures after skin contact : IF ON SKIN: Immediately rinse with plenty of soap and water (for at least 15 minutes). Remove contaminated clothing and wash before reuse. If skin irritation occurs, get medical advice/attention.
- First-aid measures after eye contact : IF IN EYES: Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes minimum). Remove contact lenses, if present and easy to do so. Continue rinsing. If eye irritation occurs, get medical advice/attention.
- First-aid measures after ingestion : IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries : May be fatal if swallowed and enters airways.
- Symptoms/injuries after inhalation : Inhalation in high concentrations may cause irritation of the mucous membranes. Aspiration of this material into the lungs may cause chemical pneumonia or death.
- Symptoms/injuries after skin contact : Contact may cause irritation.
- Symptoms/injuries after eye contact : Direct contact with the eyes is likely to be irritating. May cause burns and possible corneal damage.
- Symptoms/injuries after ingestion : May be irritating to the mucous membranes.
- Chronic symptoms : No data available.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Dry chemical. Carbon dioxide. Foam.

5.2. Special hazards arising from the substance or mixture

- Explosion hazard : Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.
- Reactivity : No dangerous reactions known under normal conditions of use.

5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Do not dispose of fire-fighting water in the environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Evacuate area. Keep upwind. Ventilate area. Spill should be handled by trained clean-up crews properly equipped with respiratory equipment and full chemical protective gear (see Section 8).

6.1.1. For non-emergency personnel

- Protective equipment : Wear Protective equipment as described in Section 8.
- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Wear suitable protective clothing, gloves and eye or face protection. Approved supplied-air respirator, in case of emergency.

Sentinel 626 Carpet Adhesive Remover (VOC Compliant) Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

- For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Foam may be used to suppress vapors.
- Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Place in a suitable container for disposal in accordance with the waste regulations (see Section 13).

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Do not handle until all safety precautions have been read and understood. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Do not breathe mists.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Heat sources. Keep container closed when not in use.

7.3. Specific end use(s)

No additional information available

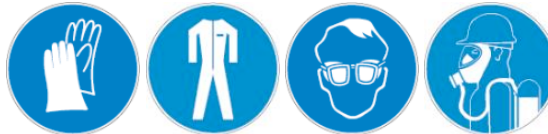
SECTION 8: Exposure controls/personal protection

8.1. Control parameters

2-aminoethanol (141-43-5)	
Remark (ACGIH)	TWA - 3 PPM, STEL - 6 PPM
Remark (US OSHA)	TWA - 3 PPM
2-(2-butoxyethoxy)ethanol (112-34-5)	
Remark (ACGIH)	TWA - 10 ppm
Remark (US OSHA)	OELs not established
Surfactant (Proprietary*)	
Remark (ACGIH)	OELs not established
Remark (US OSHA)	OELs not established

8.2. Exposure controls

- Appropriate engineering controls : Ensure adequate ventilation, especially in confined areas.
- Personal protective equipment : Gloves. Protective clothing. Protective goggles. Respiratory protection of the dependent type may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.



- Hand protection : Use gloves chemically resistant to this material when prolonged or repeated contact could occur. Gloves should be classified under Standard EN 374 or ASTM F1296. Suggested glove materials are: Natural rubber ("latex"), Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, PVC or vinyl.
- Eye protection : Eye protection, including both chemical splash goggles and face shield, must be worn when possibility exists for eye contact due to spraying liquid or airborne particles.
- Skin and body protection : Wear suitable protective clothing.
- Respiratory protection : An approved organic vapor respirator/supplied air or self-contained breathing apparatus must be used when vapor concentration exceeds applicable exposure limits.

Sentinel 626 Carpet Adhesive Remover

(VOC Compliant) Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Clear
Color	: None
Odor	: No odor
Odor Threshold	: No data available
pH	: 10.5-11.5
Relative evaporation rate (butyl acetate=1)	: Slower than ether
Melting point	: No data available
Freezing point	: No data available
Boiling point	: >100 °C (212 °F)
Flash point	: None to boiling
Self ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosive limits	: No data available

9.2. Other information

VOC content	: This floor or wall covering adhesive remover contains less than 5% V.O.C. content by weight. *When determining VOC content in accordance with the requirements set forth by the Ozone Transport Commission (OTC), effective 01-01-2009
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SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

Sparks. Heat. Open flame.

10.5. Incompatible materials

Avoid contact with : Acids or bleach.

10.6. Hazardous decomposition products

Thermal decomposition generates : Oxides of carbon and nitrogen.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: Not classified
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Sentinel 626 Carpet Adhesive Remover (VOC Compliant) Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

2-aminoethanol (141-43-5)	
LD50 oral rat	> 1500mg/kg
LD50 dermal rabbit	> 1000 mg/kg

2-(2-butoxyethoxy)ethanol (112-34-5)	
LD50 oral rat	> 4500 mg/kg
LD50 dermal rabbit	> 2500 mg/kg

Surfactant (Proprietary*)	
LD50 oral rat	> 1300 mg/kg
LD50 dermal rabbit	> 2 g/kg

Skin corrosion/irritation	: Skin Irritant Category 2
Serious eye damage/irritation	: Eye Irritant Category 1
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: May be fatal if swallowed and enters airways.
Symptoms/injuries after inhalation	: Inhalation in high concentrations may cause irritation of the mucous membranes. Aspiration of this material into the lungs may cause chemical pneumonia or death.
Symptoms/injuries after skin contact	: Contact may cause irritation.
Symptoms/injuries after eye contact	: Direct contact with the eyes is likely to be irritating. May cause burns and possible corneal damage.
Symptoms/injuries after ingestion	: May be irritating to the mucous membranes.
Chronic symptoms	: No data available.

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods	: Do not discharge to public wastewater systems without permit of pollution control authorities. No discharge to surface waters is allowed without an NPDES permit.
Waste disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations. Do not allow the product to be released into the environment.

Sentinel 626 Carpet Adhesive Remover (VOC Compliant) Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 14: Transport information

In accordance with DOT

Transport document description : Cleaning Compound
Department of Transportation (DOT) Hazard Classes : Not Regulated

Transport by sea

No additional information available

Air transport

No additional information available

In accordance with ADR / RID / IMDG / IATA / ADN

SECTION 15: Regulatory information

15.1. US Federal regulations

Sentinel 626 Carpet Adhesive Remover (VOC Compliant)

All chemical substances in this product are listed in the EPA (Environmental Protection Agency) TSCA (Toxic Substances Control Act) Inventory

SARA Section 311/312 Hazard Classes : Immediate (acute) health hazard

2-aminoethanol (141-43-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

2-(2-butoxyethoxy)ethanol (112-34-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Surfactant (Proprietary*)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

2-(2-butoxyethoxy)ethanol (112-34-5)

Listed on the Canadian DSL (Domestic Substances List) inventory.

Surfactant (Proprietary*)

Listed on the Canadian DSL (Domestic Substances List) inventory.

No additional information available

15.2.2. National regulations

2-(2-butoxyethoxy)ethanol (112-34-5)

Listed on Inventory of Existing Chemical Substances (IECSC)
Listed on the AICS (the Australian Inventory of Chemical Substances)
Listed on the Japanese ENCS (Existing & New Chemicals Substances) inventory.
Listed on the Korean ECL (Existing Chemical List) inventory.
Listed on the Philippines CCS (Chemicals & Chemical Substances) inventory.

Surfactant (Proprietary*)

Listed on Inventory of Existing Chemical Substances (IECSC)
Listed on the AICS (the Australian Inventory of Chemical Substances)
Listed on the Japanese ENCS (Existing & New Chemicals Substances) inventory.
Listed on the Korean ECL (Existing Chemical List) inventory.
Listed on the Philippines CCS (Chemicals & Chemical Substances) inventory.

15.3. US State regulations

California Proposition 65

This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm

Sentinel 626 Carpet Adhesive Remover (VOC Compliant) Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 16: Other information

Indication of changes : Revision 1.3 - 27 February 2018 - Section 2 Updated
Other information : Author. KAD

NFPA health hazard : 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.
NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions.
NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating

Health : 1
Flammability : 0
Physical : 0
Personal Protection :

The information in this document is believed to be correct as of the date issued. However, no warranty of merchantability, fitness for any particular purpose, or any other warranty is expressed or is to be implied regarding the accuracy or completeness of this information, the results to be obtained from the use of this product or the hazards related to its use. This information and product are furnished on the condition that the person receiving them shall make his own determination as to the suitability of the product for his particular purpose and on the condition that he assume the risk of his use thereof.



Sentinel 626 Carpet Adhesive Remover (VOC Compliant) Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Revision date: 02/27/2018 Supersedes: All previous versions Version: 1.3

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name : Sentinel 626 Carpet Adhesive Remover
Product form : Mixture

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Flooring adhesive removal

1.3. Details of the supplier of the safety data sheet

Sentinel Products Inc.
8901 Wyoming Avenue North
Brooklyn Park, MN 55445
Phone: (763) 571-0630
Toll-free: (800)-373-0633
www.senpro.com

1.4. Emergency telephone number

Emergency number : 1-866-359-5661

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Skin Irritation Category 2 H315
Eye Irritation Category 1 H318

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :



GHS05

Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

H315 - Causes skin irritation
H318 - Causes serious eye damage

Precautionary statements (GHS-US) :

P264 - Wash hands thoroughly after handling.
P280 - Wear eye protection, protective clothing, protective gloves
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P362 - Take off contaminated clothing and wash before reuse.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
P310 - Immediately call a POISON CENTER or doctor/physician.
P370+P378 - In case of fire: Use dry chemical, foam, CO2 for extinction.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P405 - Store locked up
P501 - Dispose of contents/container to licensed waste handling facility

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

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Name	Product identifier	%
Water	(CAS No) 7732-18-5	Proprietary*
2-aminoethanol	(CAS No) 141-43-5	Proprietary*
2-(2-butoxyethoxy)ethanol	(CAS No) 112-34-5	Proprietary*
Surfactant	(CAS No) Proprietary*	Proprietary*

*The exact percentage of composition has been withheld as a trade secret

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
- First-aid measures after skin contact : IF ON SKIN: Immediately rinse with plenty of soap and water (for at least 15 minutes). Remove contaminated clothing and wash before reuse. If skin irritation occurs, get medical advice/attention.
- First-aid measures after eye contact : IF IN EYES: Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes minimum). Remove contact lenses, if present and easy to do so. Continue rinsing. If eye irritation occurs, get medical advice/attention.
- First-aid measures after ingestion : IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries : May be fatal if swallowed and enters airways.
- Symptoms/injuries after inhalation : Inhalation in high concentrations may cause irritation of the mucous membranes. Aspiration of this material into the lungs may cause chemical pneumonia or death.
- Symptoms/injuries after skin contact : Contact may cause irritation.
- Symptoms/injuries after eye contact : Direct contact with the eyes is likely to be irritating. May cause burns and possible corneal damage.
- Symptoms/injuries after ingestion : May be irritating to the mucous membranes.
- Chronic symptoms : No data available.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Dry chemical. Carbon dioxide. Foam.

5.2. Special hazards arising from the substance or mixture

- Explosion hazard : Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.
- Reactivity : No dangerous reactions known under normal conditions of use.

5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Do not dispose of fire-fighting water in the environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Evacuate area. Keep upwind. Ventilate area. Spill should be handled by trained clean-up crews properly equipped with respiratory equipment and full chemical protective gear (see Section 8).

6.1.1. For non-emergency personnel

- Protective equipment : Wear Protective equipment as described in Section 8.
- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Wear suitable protective clothing, gloves and eye or face protection. Approved supplied-air respirator, in case of emergency.

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Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

- For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Foam may be used to suppress vapors.
- Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Place in a suitable container for disposal in accordance with the waste regulations (see Section 13).

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Do not handle until all safety precautions have been read and understood. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Do not breathe mists.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Heat sources. Keep container closed when not in use.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

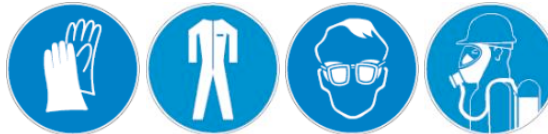
2-aminoethanol (141-43-5)	
Remark (ACGIH)	TWA - 3 PPM, STEL - 6 PPM
Remark (US OSHA)	TWA - 3 PPM

2-(2-butoxyethoxy)ethanol (112-34-5)	
Remark (ACGIH)	TWA - 10 ppm
Remark (US OSHA)	OELs not established

Surfactant (Proprietary*)	
Remark (ACGIH)	OELs not established
Remark (US OSHA)	OELs not established

8.2. Exposure controls

- Appropriate engineering controls : Ensure adequate ventilation, especially in confined areas.
- Personal protective equipment : Gloves. Protective clothing. Protective goggles. Respiratory protection of the dependent type may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.



- Hand protection : Use gloves chemically resistant to this material when prolonged or repeated contact could occur. Gloves should be classified under Standard EN 374 or ASTM F1296. Suggested glove materials are: Natural rubber ("latex"), Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, PVC or vinyl.
- Eye protection : Eye protection, including both chemical splash goggles and face shield, must be worn when possibility exists for eye contact due to spraying liquid or airborne particles.
- Skin and body protection : Wear suitable protective clothing.
- Respiratory protection : An approved organic vapor respirator/supplied air or self-contained breathing apparatus must be used when vapor concentration exceeds applicable exposure limits.

Sentinel 626 Carpet Adhesive Remover

(VOC Compliant) Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Clear
Color	: None
Odor	: No odor
Odor Threshold	: No data available
pH	: 10.5-11.5
Relative evaporation rate (butyl acetate=1)	: Slower than ether
Melting point	: No data available
Freezing point	: No data available
Boiling point	: >100 °C (212 °F)
Flash point	: None to boiling
Self ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosive limits	: No data available

9.2. Other information

VOC content	: This floor or wall covering adhesive remover contains less than 5% V.O.C. content by weight. *When determining VOC content in accordance with the requirements set forth by the Ozone Transport Commission (OTC), effective 01-01-2009
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SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

Sparks. Heat. Open flame.

10.5. Incompatible materials

Avoid contact with : Acids or bleach.

10.6. Hazardous decomposition products

Thermal decomposition generates : Oxides of carbon and nitrogen.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: Not classified
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Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

2-aminoethanol (141-43-5)	
LD50 oral rat	> 1500mg/kg
LD50 dermal rabbit	> 1000 mg/kg

2-(2-butoxyethoxy)ethanol (112-34-5)	
LD50 oral rat	> 4500 mg/kg
LD50 dermal rabbit	> 2500 mg/kg

Surfactant (Proprietary*)	
LD50 oral rat	> 1300 mg/kg
LD50 dermal rabbit	> 2 g/kg

Skin corrosion/irritation	: Skin Irritant Category 2
Serious eye damage/irritation	: Eye Irritant Category 1
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: May be fatal if swallowed and enters airways.
Symptoms/injuries after inhalation	: Inhalation in high concentrations may cause irritation of the mucous membranes. Aspiration of this material into the lungs may cause chemical pneumonia or death.
Symptoms/injuries after skin contact	: Contact may cause irritation.
Symptoms/injuries after eye contact	: Direct contact with the eyes is likely to be irritating. May cause burns and possible corneal damage.
Symptoms/injuries after ingestion	: May be irritating to the mucous membranes.
Chronic symptoms	: No data available.

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods	: Do not discharge to public wastewater systems without permit of pollution control authorities. No discharge to surface waters is allowed without an NPDES permit.
Waste disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations. Do not allow the product to be released into the environment.

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Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 14: Transport information

In accordance with DOT

Transport document description : Cleaning Compound
Department of Transportation (DOT) Hazard Classes : Not Regulated

Transport by sea

No additional information available

Air transport

No additional information available

In accordance with ADR / RID / IMDG / IATA / ADN

SECTION 15: Regulatory information

15.1. US Federal regulations

Sentinel 626 Carpet Adhesive Remover (VOC Compliant)

All chemical substances in this product are listed in the EPA (Environmental Protection Agency) TSCA (Toxic Substances Control Act) Inventory

SARA Section 311/312 Hazard Classes : Immediate (acute) health hazard

2-aminoethanol (141-43-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

2-(2-butoxyethoxy)ethanol (112-34-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Surfactant (Proprietary*)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

2-(2-butoxyethoxy)ethanol (112-34-5)

Listed on the Canadian DSL (Domestic Substances List) inventory.

Surfactant (Proprietary*)

Listed on the Canadian DSL (Domestic Substances List) inventory.

No additional information available

15.2.2. National regulations

2-(2-butoxyethoxy)ethanol (112-34-5)

Listed on Inventory of Existing Chemical Substances (IECSC)
Listed on the AICS (the Australian Inventory of Chemical Substances)
Listed on the Japanese ENCS (Existing & New Chemicals Substances) inventory.
Listed on the Korean ECL (Existing Chemical List) inventory.
Listed on the Philippines CCS (Chemicals & Chemical Substances) inventory.

Surfactant (Proprietary*)

Listed on Inventory of Existing Chemical Substances (IECSC)
Listed on the AICS (the Australian Inventory of Chemical Substances)
Listed on the Japanese ENCS (Existing & New Chemicals Substances) inventory.
Listed on the Korean ECL (Existing Chemical List) inventory.
Listed on the Philippines CCS (Chemicals & Chemical Substances) inventory.

15.3. US State regulations

California Proposition 65

This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm

Sentinel 626 Carpet Adhesive Remover (VOC Compliant) Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 16: Other information

Indication of changes : Revision 1.3 - 27 February 2018 - Section 2 Updated
Other information : Author. KAD

NFPA health hazard : 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.
NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions.
NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating

Health : 1
Flammability : 0
Physical : 0
Personal Protection :

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Product name : Basic-G

Use of the substance/mixture : Cleaning

Shaklee Corporation
Pleasanton, CA 94588
T 925-924-2000

Emergency number : 925-931-4189

Flam. Liq. 4	H227
Acute Tox. 4 (Oral)	H302
Acute Tox. 4 (Dermal)	H312
Skin Corr. 1C	H314
Eye Dam. 1	H318
Repr. 2	H361

Full text of hazard classes and H-statements : see section 16

Hazard pictograms (GHS US) :



GHS05

GHS07

GHS08

Signal word (GHS US) :

Danger

Hazard statements (GHS US) :

H227 - Combustible liquid
H302+H312 - Harmful if swallowed or in contact with skin
H314 - Causes severe skin burns and eye damage
H318 - Causes serious eye damage
H361 - Suspected of damaging fertility or the unborn child

Precautionary statements (GHS US) :

P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260 - Do not breathe dust/fume/gas/mist/vapors/spray.
P264 - Wash hands, forearms and face thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312 - If swallowed: Call a poison center or doctor if you feel unwell
P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting
P302+P352 - If on skin: Wash with plenty of water
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P308+P313 - If exposed or concerned: Get medical advice/attention.
P310 - Immediately call a poison center or doctor
P312 - Call a poison center or doctor if you feel unwell
P321 - Specific treatment (see supplemental first aid instruction on this label)
P322 - Specific treatment (see supplemental first aid instruction on this label)
P330 - Rinse mouth.

Safety Data Sheet

P362+P364 - Take off contaminated clothing and wash it before reuse.
P363 - Wash contaminated clothing before reuse.
P370+P378 - In case of fire: Use media other than water to extinguish.
P403+P235 - Store in a well-ventilated place. Keep cool.
P405 - Store locked up.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

No additional information available

Not applicable

Not applicable

Didecyldimethylammonium chloride	(CAS-No.) 7173-51-5	10 - 15	Acute Tox. 3 (Oral), H301
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	(CAS-No.) 68424-85-1	5 - 10	Acute Tox. 4 (Oral), H302
Ethyl alcohol	(CAS-No.) 64-17-5	3 - 5	Flam. Liq. 2, H225 Carc. 1A, H350
Edetic acid	(CAS-No.) 60-00-4	3 - 5	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319
1-Octanamine, N,N-dimethyl-, N-oxide	(CAS-No.) 2605-78-9	3 - 5	Not classified
Fragrance Current Basic G	Proprietary	< 1	Flam. Liq. 4, H227 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Repr. 2, H361
Copper	(CAS-No.) 7440-50-8	< 0.01	Not classified

Full text of hazard classes and H-statements : see section 16

First-aid measures after inhalation	: Move to fresh air. If unconscious, place in recovery position and seek medical advice. If breathing is irregular or stopped, administer artificial respiration. Call a physician or poison control center immediately. Keep respiratory tract clear.
First-aid measures after skin contact	: After contact with skin, wash immediately with plenty of soap and water. Take off contaminated clothing and shoes immediately. Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty. Take victim immediately to hospital.
First-aid measures after eye contact	: In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. Continue rinsing eyes during transport to hospital.
First-aid measures after ingestion	: Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Take victim immediately to hospital.

Symptoms/effects after inhalation	: None under normal use.
Symptoms/effects after skin contact	: Causes severe skin burns.
Symptoms/effects after eye contact	: Small amounts splashed into eyes can cause irreversible tissue damage and blindness.
Symptoms/effects after ingestion	: Harmful if swallowed.

No additional information available

Suitable extinguishing media	: Water spray, Alcohol resistant foam, dry chemical
Unsuitable extinguishing media	: High volume water jet.

Safety Data Sheet

Fire hazard : Heating or fire can release toxic gas.
Explosion hazard : None known.

Protection during firefighting : Firefighters should wear full protective gear. Use water spray to cool unopened containers.

No additional information available

Use respirator when performing operations involving potential exposure to vapor of the product.

Prevent entry to sewers and public waters.

For containment : Stop the flow of material, if this is without risk.
Methods for cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations

No additional information available

Precautions for safe handling : Do not breathe vapors/dust. Avoid contact with skin and eyes. Smoking, eating and drinking should be prohibited in the application area. Provide sufficient air exchange and/or exhaust in work rooms. To avoid spills during handling keep bottle on a metal tray. Dispose of rinse water in accordance with local and national regulations.

Storage conditions : Keep container tightly closed. Keep in a well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Electrical installations / working materials must comply with the technological safety standards. To maintain product quality, do not store in heat or direct sunlight.

Not applicable

Not applicable

ACGIH	ACGIH STEL (ppm)	1000 ppm
OSHA	OSHA PEL (TWA) (mg/m ³)	1900 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	1000 ppm
IDLH	US IDLH (ppm)	3300 ppm (10% LEL)
NIOSH	NIOSH REL (TWA) (mg/m ³)	1900 mg/m ³
NIOSH	NIOSH REL (TWA) (ppm)	1000 ppm

Not applicable

Not applicable

Safety Data Sheet

ACGIH	ACGIH TWA (mg/m ³)	0.2 mg/m ³ (fume)
OSHA	OSHA PEL (TWA) (mg/m ³)	0.1 mg/m ³ (fume) 1 mg/m ³ (dust and mist)
IDLH	US IDLH (mg/m ³)	100 mg/m ³ (dust, fume and mist)
NIOSH	NIOSH REL (TWA) (mg/m ³)	1 mg/m ³ (dust and mist) 0.1 mg/m ³ (fume)

Appropriate engineering controls : None required under normal product handling conditions.
Hand protection : Wear impervious gloves to minimize skin contact.
Eye protection : Chemical goggles or safety glasses.
Skin and body protection : Wear suitable working clothes.
Respiratory protection : None required under normal product handling conditions. In the case of vapor formation use a respirator with an approved filter.

Physical state : Liquid
Color : Colorless
Odor : Characteristic
Odor threshold : No data available
pH : 7.2 - 8.2
Melting point : No data available
Freezing point : No data available
Boiling point : No data available
Flash point : 66 °C
Relative evaporation rate (butyl acetate=1) : No data available
Flammability (solid, gas) : No data available
Vapor pressure : No data available
Relative vapor density at 20 °C : No data available
Relative density : No data available
Solubility : No data available
Log Pow : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Viscosity : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosion limits : No data available
Explosive properties : No data available
Oxidizing properties : No data available

No additional information available

No additional information available

The product is stable at normal handling and storage conditions.

Will not occur.

Safety Data Sheet

Heat

Strong oxidizing agents. Strong acids and strong bases

Not determined.

Acute toxicity : Not classified

ATE US (oral)	487.836 mg/kg body weight
ATE US (dermal)	1100 mg/kg body weight
LD50 oral rat	84 mg/kg
ATE US (oral)	84 mg/kg
LD50 oral rat	426 mg/kg
ATE US (oral)	426 mg/kg
LD50 oral rat	7060 mg/kg
LC50 inhalation rat (mg/l)	124.7 mg/l/4h
ATE US (oral)	7060 mg/kg
LD50 oral rat	> 2000 mg/kg
ATE US (oral)	1700 mg/kg body weight

Skin corrosion/irritation : Causes severe skin burns and eye damage.
Serious eye damage/irritation : Causes serious eye damage.
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

IARC group	1 - Carcinogenic to humans
In OSHA Hazard Communication Carcinogen list	Yes

Reproductive toxicity : Suspected of damaging fertility or the unborn child.

Specific target organ toxicity – single exposure : Not classified

Specific target organ toxicity – repeated exposure : Not classified

Aspiration hazard : Not classified

LC50 fish 1	12.0 - 16.0 ml/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 Daphnia 1	9268 - 14221 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 fish 2	> 100 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 Daphnia 2	2 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])

Safety Data Sheet

LC50 fish 1	34 - 62 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 Daphnia 1	113 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
LC50 fish 2	44.2 - 76.5 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])

LC50 fish 1	0.0068 - 0.0156 mg/l (Exposure time: 96 h - Species: Pimephales promelas)
EC50 Daphnia 1	0.03 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
LC50 fish 2	< 0.3 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])

No additional information available

Log Pow	-0.32
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No additional information available

No additional information available

Product/Packaging disposal recommendations : Dispose of contents/container in accordance with local/regional/national/international regulations.

In accordance with DOT

Transport document description : UN1760 Corrosive liquids, n.o.s. (Alkyldimethylbenzyl ammonium chloride, Didecyldimethylammonium chloride), 8, II

UN-No.(DOT) : UN1760

Proper Shipping Name (DOT) : Corrosive liquids, n.o.s.
Alkyldimethylbenzyl ammonium chloride, Didecyldimethylammonium chloride

Class (DOT) : 8 - Class 8 - Corrosive material 49 CFR 173.136

Packing group (DOT) : II - Medium Danger

Hazard labels (DOT) : 8 - Corrosive



DOT Packaging Non Bulk (49 CFR 173.xxx) : 202

DOT Packaging Bulk (49 CFR 173.xxx) : 242

Safety Data Sheet

DOT Special Provisions (49 CFR 172.102) : B2 - MC 300, MC 301, MC 302, MC 303, MC 305, and MC 306 and DOT 406 cargo tanks are not authorized.
 IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized.
 T11 - 6 178.274(d)(2) Normal..... 178.275(d)(3)
 TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the following: (image) Where: t_r is the maximum mean bulk temperature during transport, t_f is the temperature in degrees celsius of the liquid during filling, and a is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (t_f) and the maximum mean bulk temperature during transportation (t_r) both in degrees celsius. b. For liquids transported under ambient conditions may be calculated using the formula: (image) Where: d_{15} and d_{50} are the densities (in units of mass per unit volume) of the liquid at 15 C (59 F) and 50 C (122 F), respectively.
 TP27 - A portable tank having a minimum test pressure of 4 bar (400 kPa) may be used provided the calculated test pressure is 4 bar or less based on the MAWP of the hazardous material, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.

DOT Packaging Exceptions (49 CFR 173.xxx) : 154

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 1 L

DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 30 L

DOT Vessel Stowage Location : B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.

DOT Vessel Stowage Other : 40 - Stow "clear of living quarters"

Emergency Response Guide (ERG) Number : 154

Other information : No supplementary information available.



Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA TSCA Regulatory Flag	TP - TP - indicates a substance that is the subject of a proposed TSCA section 4 test rule.
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA TSCA Regulatory Flag	P - P - indicates a commenced Premanufacture Notice (PMN) substance.
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
CERCLA RQ	5000 lb
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	5000 lb no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm
SARA Section 313 - Emission Reporting	1 %

Safety Data Sheet

U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	Yes	No	No	

U.S. - Massachusetts - Right To Know List U.S. - Minnesota - Hazardous Substance List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List
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U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List

U.S. - Massachusetts - Right To Know List U.S. - Minnesota - Hazardous Substance List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List
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Full text of H-phrases:

Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Carc. 1A	Carcinogenicity Category 1A
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Liq. 2	Flammable liquids Category 2
Flam. Liq. 4	Flammable liquids Category 4
Repr. 2	Reproductive toxicity Category 2
Skin Corr. 1C	Skin corrosion/irritation Category 1C
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization, Category 1
H225	Highly flammable liquid and vapour
H227	Combustible liquid
H301	Toxic if swallowed
H302	Harmful if swallowed
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H350	May cause cancer
H361	Suspected of damaging fertility or the unborn child

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SAFETY DATA SHEET

P007

Section 1. Identification

Product name : STEP ONE® Interior/Exterior All Surface Acrylic Stainblocking Primer

Product code : P007

Other means of identification : Not available.

Product type : Liquid.

Relevant identified uses of the substance or mixture and uses advised against

Not applicable.

Manufacturer : Conco Paints
101 Prospect Avenue N.W.
Cleveland, OH 44115

Emergency telephone number of the company : (216) 566-2917

Product Information Telephone Number : Not available.

Regulatory Information Telephone Number : (216) 566-2902

Transportation Emergency Telephone Number : (800) 424-9300

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : CARCINOGENICITY - Category 1A
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (respiratory tract) - Category 1
Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 11.4%

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : May cause cancer.
Causes damage to organs through prolonged or repeated exposure. (respiratory tract)

Precautionary statements

General : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

Prevention : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

Response : Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention.

Storage : Store locked up.

Date of issue/Date of revision

: 3/27/2016

Date of previous issue

: 2/13/2016

Version : 2

1/11

Section 2. Hazards identification

Disposal

Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Adequate ventilation required when sanding or abrading the dried film. If Adequate ventilation cannot be provided wear an approved particulate respirator (NIOSH approved). Follow respirator manufacturer's directions for respirator use. DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Abrading or sanding of the dry film may release Crystalline Silica which has been shown to cause lung damage and cancer under long term exposure. Please refer to the SDS for additional information. Do not transfer contents to other containers for storage.

Hazards not otherwise classified

: None known.

Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

Other means of identification

: Not available.

CAS number/other identifiers

Ingredient name	% by weight	CAS number
Titanium Dioxide	≥10 - ≤25	13463-67-7
Cristobalite	≤3	14464-46-1
crystalline silica, respirable powder	≤0.3	14808-60-7

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact

: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Inhalation

: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact

: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion

: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Section 4. First aid measures

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : No specific data.
- Skin contact** : No specific data.
- Ingestion** : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

Specific hazards arising from the chemical : In a fire or if heated, a pressure increase will occur and the container may burst.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
 - carbon dioxide
 - carbon monoxide
 - metal oxide/oxides

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Titanium Dioxide Cristobalite crystalline silica, respirable powder	<p>ACGIH TLV (United States, 3/2015). TWA: 10 mg/m³ 8 hours.</p> <p>OSHA PEL (United States, 2/2013). TWA: 15 mg/m³ 8 hours. Form: Total dust</p> <p>OSHA PEL Z3 (United States, 2/2013). TWA: 250 MPPCF / 2 x (%SiO₂+5) 8 hours. Form: Respirable TWA: 10 MG/M3 / 2 x (%SiO₂+2) 8 hours. Form: Respirable TWA: 30 MG/M3 / 2 x (%SiO₂+2) 8 hours. Form: Total dust</p> <p>ACGIH TLV (United States, 3/2015). TWA: 0.025 mg/m³ 8 hours. Form: Respirable fraction</p> <p>NIOSH REL (United States, 10/2013). TWA: 0.05 mg/m³ 10 hours. Form: respirable dust</p> <p>OSHA PEL Z3 (United States, 2/2013). TWA: 250 MPPCF / (%SiO₂+5) 8 hours. Form: Respirable TWA: 10 MG/M3 / (%SiO₂+2) 8 hours. Form: Respirable</p> <p>ACGIH TLV (United States, 3/2015). TWA: 0.025 mg/m³ 8 hours. Form: Respirable fraction</p> <p>NIOSH REL (United States, 10/2013). TWA: 0.05 mg/m³ 10 hours. Form: respirable dust</p>

Appropriate engineering controls

: If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

Section 8. Exposure controls/personal protection

- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance

- Physical state** : Liquid.
- Color** : Not available.
- Odor** : Not available.
- Odor threshold** : Not available.
- pH** : 9
- Melting point** : Not available.
- Boiling point** : 100°C (212°F)
- Flash point** : Closed cup: >93.3°C (>199.9°F)
- Evaporation rate** : 0.09 (butyl acetate = 1)
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : Lower: 0.6%
Upper: 4.2%
- Vapor pressure** : 0.31 kPa (2.333 mm Hg) [at 20°C]
- Vapor density** : 1 [Air = 1]
- Relative density** : 1.28
- Solubility** : Not available.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- Viscosity** : Kinematic (room temperature): >0.205 cm²/s (>20.5 cSt)
Kinematic (40°C (104°F)): >0.205 cm²/s (>20.5 cSt)
- Molecular weight** : Not applicable.
- Aerosol product**
- Heat of combustion** : 1.111 kJ/g

Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid** : No specific data.
- Incompatible materials** : No specific data.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Not available.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Titanium Dioxide	Skin - Mild irritant	Human	-	72 hours 300 Micrograms Intermittent	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
Titanium Dioxide	-	2B	-
Cristobalite	-	1	Known to be a human carcinogen.
crystalline silica, respirable powder	-	1	Known to be a human carcinogen.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Section 11. Toxicological information

Name	Category	Route of exposure	Target organs
Cristobalite crystalline silica, respirable powder	Category 1 Category 1	Inhalation Inhalation	respiratory tract Not determined

Aspiration hazard

Not available.

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : Causes damage to organs through prolonged or repeated exposure.

Carcinogenicity : May cause cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	224452.9 mg/kg

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Titanium Dioxide	Acute LC50 >1000000 µg/l Marine water	Fish - Fundulus heteroclitus	96 hours

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Titanium Dioxide	-	352	low

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	IATA	IMDG
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-	-
Transport hazard class(es)	-	-	-	-	-
Packing group	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.
Additional information	<u>Special provisions</u> Not Applicable	<u>Special provisions</u> Not Applicable	<u>Special provisions</u> Not Applicable	<u>Special provisions</u> Not Applicable	<u>Special provisions</u> Not Applicable

Section 14. Transport information

Special precautions for user : Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

Transport in bulk according to Annex II of MARPOL and the IBC Code : Not available.

Proper shipping name : Not available.

Ship type : Not available.

Pollution category : Not available.

Section 15. Regulatory information

SARA 313

SARA 313 (40 CFR 372.45) supplier notification can be found on the Environmental Data Sheet.

California Prop. 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health	*	1
Flammability		0
Physical hazards		0

The customer is responsible for determining the PPE code for this material.

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

Procedure used to derive the classification

Classification

CARCINOGENICITY - Category 1A
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (respiratory tract) - Category 1

Justification

Calculation method
Calculation method

History

Date of printing : 3/27/2016

Date of issue/Date of revision : 3/27/2016

Date of previous issue : 2/13/2016

Version : 2

Section 16. Other information

Key to abbreviations

: ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

Notice to reader

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by Sherwin-Williams, including but not limited to the incorporation of non Sherwin-Williams products or the use or addition of products in proportions not specified by Sherwin-Williams. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.

SAFETY DATA SHEET



Issuing Date: 17-Dec-2015

Revision Date: 25-Oct-2016

Version 3

This Safety Data Sheet (SDS) is not required under local legislation, implementing the UN Globally Harmonized System (GHS). This SDS is being provided as a courtesy to help assist in the safe handling and proper use of the product

1. IDENTIFICATION

Product Name	Tide
Product Identifier	90785649_RET_NG
Product Type:	Finished Product - Consumer (Retail) Use Only
Recommended Use	Laundry Care.
Restrictions on Use	Use only as directed on label.
Details of the supplier of the safety data sheet	PROCTER & GAMBLE - Fabric and Home Care Division Ivorydale Technical Centre 5289 Spring Grove Avenue Cincinnati, Ohio 45217-1087 USA Procter & Gamble Inc. P.O. Box 355, Station A Toronto, ON M5W 1C5 1-800-331-3774
E-mail Address	pgsds.im@pg.com
Emergency Telephone	Transportation (24 HR) CHEMTREC - 1-800-424-9300 (U.S./ Canada) or 1-703-527-3887 Mexico toll free in country: 800-681-9531

2. HAZARD IDENTIFICATION

"Consumer Products", as defined by the US Consumer Product Safety Act and which are used as intended (typical consumer duration and frequency), are exempt from the OSHA Hazard Communication Standard (29 CFR 1910.1200). This SDS is being provided as a courtesy to help assist in the safe handling and proper use of the product.

This product is classified under 29CFR 1910.1200(d) and the Canadian Hazardous Products Regulation as follows:.

Hazard Category

Skin corrosion/irritation	Category 2
Eye Damage / Irritation	Category 2A

Signal Word	WARNING
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Hazard Statements	Causes serious eye irritation Causes skin irritation
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Hazard pictograms

**Precautionary Statements**

Wash hands thoroughly after handling

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

If eye irritation persists: Get medical advice/attention

IF SWALLOWED:

Drink 1 or 2 glasses of water

IF ON SKIN:

Rinse with plenty of water

If skin irritation occurs, get medical advice/attention

Precautionary Statements - Storage None**Precautionary Statements - Disposal** None**Hazards not otherwise classified (HNOC)** None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients are listed according to 29CFR 1910.1200 Appendix D and the Canadian Hazardous Products Regulation

Chemical Name	Synonyms	Trade Secret	CAS-No	Weight %
Sodium carbonate	Carbonic acid sodium salt (1:2)	No	497-19-8	25 - 30
Benzenesulfonic acid, mono-C10-16-alkyl derivs., sodium salts	Benzenesulfonic acid, mono-C10-16-alkyl derivs., sodium salts	No	68081-81-2	10 - 15
Silicic acid, aluminum sodium salt	Silicic acid, aluminum sodium salt	No	1344-00-9	10 - 15
Carbonic acid disodium salt, compd. with hydrogen peroxide	Carbonic acid disodium salt, compd. with hydrogen peroxide	No	15630-89-4	5 - 10
Sodium 2-(nonanoyloxy)benzenesulfonate	Nonanoic acid, sulfophenyl ester, sodium salt (1:1)	No	91125-43-8	1 - 5
Silicic acid, sodium salt	Silicic acid, sodium salt	No	1344-09-8	1 - 5
Poly(oxy-1,2-ethanediyl), alpha-sulfo-omega-hydroxy-, C10-16-alkyl ethers, sodium salts	Poly(oxy-1,2-ethanediyl), alpha-sulfo-omega-hydroxy-, C10-16-alkyl ethers, sodium salts	No	68585-34-2	1 - 5

4. FIRST AID MEASURES

First aid measures for different exposure routes**Eye contact**

Rinse with plenty of water. Get medical attention immediately if irritation persists.

Skin contact

Rinse with plenty of water. Get medical attention if irritation develops and persists.

Ingestion

Drink 1 or 2 glasses of water. Do NOT induce vomiting. Get medical attention immediately if

symptoms occur.

Inhalation Move to fresh air. If symptoms persist, call a physician.

Most important symptoms/effects, acute and delayed None under normal use conditions.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media Dry chemical, CO₂, alcohol-resistant foam or water spray.

Unsuitable Extinguishing Media None.

Special hazard None known.

Special protective equipment for fire-fighters As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Specific hazards arising from the chemical None.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Use personal protective equipment. Do not get in eyes, on skin, or on clothing.

Advice for emergency responders Use personal protective equipment as required.

Methods and materials for containment and cleaning up

Methods for containment Prevent dust cloud. Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Sweep up and shovel into suitable containers for disposal. Dispose of in accordance with local regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Use personal protective equipment as required. Keep container closed when not in use. Never return spills in original containers for re-use. Keep out of the reach of children.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible products None known.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines .

Chemical Name	CAS-No	Alberta	Quebec	Ontario TWAEV	British Columbia
Silicic acid, aluminum sodium salt	1344-00-9			TWA: 1 mg/m ³	TWA: 1.0 mg/m ³

No relevant exposure guidelines for other ingredients

Exposure controls

Engineering Measures

Distribution, Workplace and Household Settings:
Ensure adequate ventilation

Product Manufacturing Plant (needed at Product-Producing Plant ONLY):
Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction

Personal Protective Equipment

Eye Protection

Distribution, Workplace and Household Settings:
No special protective equipment required

Product Manufacturing Plant (needed at Product-Producing Plant ONLY):
Use appropriate eye protection

Hand Protection

Distribution, Workplace and Household Settings:
For sensitive skin or prolonged use, wear gloves

Product Manufacturing Plant (needed at Product-Producing Plant ONLY):
Protective gloves

Skin and Body Protection

Distribution, Workplace and Household Settings:
No special protective equipment required

Product Manufacturing Plant (needed at Product-Producing Plant ONLY):
Wear suitable protective clothing

Respiratory Protection

Distribution, Workplace and Household Settings:
No special protective equipment required

Product Manufacturing Plant (needed at Product-Producing Plant ONLY):
In case of inadequate ventilation wear respiratory protection

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State @20°C	Solid
Appearance	white powder blue specks
Odor	Scented
Odor threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Note</u>
pH value	10 - 11.4	
Melting/freezing point	No information available	
Boiling point/boiling range	No information available	
Flash point	No information available	
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limits in Air		
Upper flammability limit	No information available	
Lower Flammability Limit	No information available	

Vapor pressure	No information available
Vapor density	No information available
Relative density	400 - 650 g/l
Water solubility	No information available
Partition coefficient: n-octanol/water	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Viscosity of Product	No information available
VOC Content (%)	Products comply with US state and federal regulations for VOC content in consumer products.

10. STABILITY AND REACTIVITY

Reactivity	None under normal use conditions.
Stability	Stable under normal conditions.
Hazardous polymerization	Hazardous polymerization does not occur.
Hazardous Reactions	None under normal processing.
Conditions to Avoid	None under normal processing.
Materials to avoid	None in particular.
Hazardous Decomposition Products	None under normal use conditions.

11. TOXICOLOGICAL INFORMATION

Product Information

Information on likely routes of exposure

Inhalation	No known effect.
Skin contact	Irritating to skin.
Ingestion	No known effect.
Eye contact	Causes serious eye irritation.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Acute toxicity	No known effect.
Skin corrosion/irritation	Irritating to skin.
Serious eye damage/eye irritation	Causes serious eye irritation.
Skin sensitization	No known effect.
Respiratory sensitization	No known effect.
Germ cell mutagenicity	No known effect.
Neurological Effects	No known effect.
Reproductive toxicity	No known effect.
Developmental toxicity	No known effect.
Teratogenicity	No known effect.
STOT - single exposure	No known effect.
STOT - repeated exposure	No known effect.
Target Organ Effects	No known effect.
Aspiration hazard	No known effect.
Carcinogenicity	No known effect.

Component Information

Chemical Name	CAS-No	Oral LD50	Dermal LD50	Inhalation LC50
Sodium carbonate	497-19-8	2800 mg/kg bw	> 2000 mg/kg bw (US EPA 16 CFR 1500.40)	-
Silicic acid, aluminum sodium salt	1344-00-9	> 10000 mg/kg bw (//OECD 401)	> 5000 mg/kg bw (//OECD 402)	> 2.08 mg/L air (//OECD 403)
Carbonic acid disodium salt, compd. with hydrogen peroxide	15630-89-4	893 mg/kg bw (U.S. EPA Office of Pesticides and	> 2000 mg/kg bw (EPA Guideline; standard acute	-

		Toxic Substances (1984) "Acute Exposure Oral Toxicity"; standard acute method; rat)	method; rabbit)	
Silicic acid, sodium salt	1344-09-8	3400 mg/kg bw (Similar to OECD 401; standard acute method; rat)	> 5000 mg/kg bw (Read across data on AgSil TM 25 Potassium silicate solution; rat)	> 2.06 mg/L air (Read across data AgSil TM 25 Potassium silicate solution; EPA OPPTS 870.1300; standard acute method; rat)
Poly(oxy-1,2-ethanediyl), alpha-sulfo-omega-hydroxy-, C10-16-alkyl ethers, sodium salts	68585-34-2	>2001 mg/kg	-	-

12. ECOLOGICAL INFORMATION

Ecotoxicity

The product is not expected to be hazardous to the environment.

Persistence and degradability No information available.

Bioaccumulative potential No information available.

Mobility No information available.

Other adverse effects No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment

Waste from Residues / Unused Products Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging Disposal should be in accordance with applicable regional, national and local laws and regulations.

California Hazardous Waste Codes (non-household setting) 331

14. TRANSPORT INFORMATION

DOT Not regulated

IMDG Not regulated

IATA Not regulated

15. REGULATORY INFORMATION

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):.

Chemical Name	CAS-No	Hazardous Substances RQs	Extremely Hazardous Substances RQs	CERCLA/SARA 302 TPQ
Sulphuric acid	7664-93-9	1000 lb	1000 lb	1000 lb
Sodium hydroxide	1310-73-2	1000 lb	-	

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990.

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical Name	CAS-No	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sulphuric acid	7664-93-9	1000 lb	-	-	X
Sodium hydroxide	1310-73-2	1000 lb	-	-	X

California Proposition 65

This product is not subject to warning labeling under California Proposition 65.

Ethanol is only considered a Proposition 65 developmental hazard when it is ingested as an alcoholic beverage.

U.S. State Regulations (RTK)

Chemical Name	CAS-No	Massachusetts
Sulfuric acid sodium salt (1:2)	7757-82-6	X

Chemical Name	CAS-No	Pennsylvania
Sulfuric acid sodium salt (1:2)	7757-82-6	X
Sulphuric acid	7664-93-9	X
Sodium hydroxide	1310-73-2	X

International Inventories**United States**

All intentionally-added components of this product(s) are listed on the US TSCA Inventory.

Canada

This product is in compliance with CEPA for import by P&G.

Legend

United States Toxic Substances Control Act Section 8(b) Inventory (TSCA)

CEPA - Canadian Environmental Protection Act

16. OTHER INFORMATION

Issuing Date: 17-Dec-2015

Revision Date: 25-Oct-2016

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of SDS

Section 1 - PRODUCT AND COMPANY IDENTIFICATION

Material Name

PERFORMANCE PLUS ENGINE OIL

Includes Grades: 5W-20, 5W-30, 10W-30, 10W-40, 20W-50, 10W, 30, SAE 30

Product Code

Prefix 21

Synonyms

Petroleum oil; Lube oil; Petroleum hydrocarbon; Lubricant.

Product Use Recommended Use

For lubricating passenger car motors. If this product is used in combination with other products, refer to the Safety Data Sheets for those products.

Restrictions on Use

None known.

MANUFACTURER/SUPPLIER

Safety-Kleen Systems, Inc.
2600 North Central Expressway
Suite 200
Richardson, TX 75080
www.safety-kleen.com

IMPORTER/DISTRIBUTOR

Safety-Kleen Canada, Inc.
25 Regan Road
Brampton, Ontario, Canada L1A 1B2

Phone: 1-800-669-5740

Emergency Phone #: 1-800-468-1760

Issue Date

March 30, 2017

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October 31, 1988

Section 2 - HAZARDS IDENTIFICATION

Classification in accordance with Schedule 1 of Canada's Hazardous Products Regulations (HPR) (SOR/2015-17) and paragraph (d) of 29 CFR 1910.1200 in the United States

Not hazardous according to classification criteria.

GHS Label Elements

Symbol(s)

None needed according to classification criteria.

Signal Word

None needed according to classification criteria.

Hazard Statement(s)

None needed according to classification criteria.

Precautionary Statement(s)

Prevention

None needed according to classification criteria.

Response

None needed according to classification criteria.

Storage

Safety Data Sheet

None needed according to classification criteria.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) Not Otherwise Classified

Repeated exposure may cause skin dryness or cracking. When aerosolizing, misting, or heating these products, high concentrations of generated vapor or mist may irritate the respiratory tract (nose, throat, and lungs).

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

CAS	Component Name	Percent
64741-88-4	Petroleum distillates, solvent-refined heavy paraffinic	0-100
64742-01-4	Residual oils, petroleum, solvent-refined	0-100
64742-57-0	Residual oils (petroleum), hydrotreated	0-100
72623-83-7	Lubricating oils, petroleum, C<gt;25, hydrotreated bright stock-based	0-100
64742-62-7	Residual oils (petroleum), solvent dewaxed	0-100
64742-58-1	Lubricating oils, petroleum, hydrotreated spent	3-100
72623-87-1	Lubricating oils, petroleum, C20-50, hydrotreated neutral oil-based	0-40
178603-64-0	Gas oils, petroleum, vacuum, hydrocracked, hydroisomerized, hydrogenated, C15-30, branched and cyclic, high viscosity index	0-45
178603-65-1	Gas oils, petroleum, vacuum, hydrocracked, hydroisomerized, hydrogenated, C20-40, branched and cyclic, high viscosity index	0-45
178603-66-2	Gas oils, petroleum, vacuum, hydrocracked, hydroisomerized, hydrogenated, C25-55, branched and cyclic, high viscosity index	0-45
Not Available	Mineral Oil	4-24
64742-52-5	Petroleum distillates, hydrotreated heavy naphthenic	0-26
68649-42-3	Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	0.25-1.5

Section 4 - FIRST AID MEASURES

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if needed.

Skin

IF ON SKIN: Wash with plenty of soap and water. Get medical attention, if needed.

Safety Data Sheet

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Get medical attention if needed.

Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting.

Most Important Symptoms/Effects

Acute

No information on significant adverse effects.

Delayed

No information on significant adverse effects.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically and supportively. Treatment may vary with condition of victim and specifics of incident.

Section 5 - FIRE FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Carbon dioxide, regular foam, dry chemical, water spray, or water fog. Water or foam may cause frothing.

Unsuitable Extinguishing Media

Do not use high pressure water streams.

Special Hazards Arising from the Chemical

Negligible fire hazard. Avoid friction, static electricity, and sparks.

Hazardous Combustion Products

Burning may produce: Carbon monoxide, aldehydes, hydrogen sulfide, alkyl mercaptans, sulfides, oxides of sulfur, calcium and zinc and other unidentified organic compounds.

Fire Fighting Measures

Move container from fire area if it can be done without risk. Cool containers with water spray until well after the fire is out. Stay away from the ends of tanks. Keep unnecessary people away, isolate hazard area and deny entry.

Special Protective Equipment and Precautions for Firefighters

A positive-pressure, self-contained breathing apparatus (SCBA) and full-body protective equipment are required for fire emergencies.

Section 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Wear personal protective clothing and equipment, see Section 8.

Methods and Materials for Containment and Cleaning Up

Remove all ignition sources. Do not touch or walk through spilled product. Stop leak if you can do it without risk. Wear protective equipment and provide engineering controls as specified in SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Ventilate area and avoid breathing vapor or mist. Contain spill away from surface water and sewers. Contain spill as a liquid for possible recovery, or sorb with compatible sorbent material and shovel with a clean, sparkproof tool into a sealable container for disposal. Additionally, for large spills: Dike far ahead of liquid spill for collection and later disposal.

Safety Data Sheet

Section 7 - HANDLING AND STORAGE

Precautions for Safe Handling

Keep away from sparks or flame. Where flammable mixtures may be present, equipment safe for such locations should be used. Use clean tools. When transferring large volumes of product, metal containers, including trucks and tank cars, should be grounded and bonded. These products have a low vapor pressure and are not expected to present an inhalation hazard under normal temperatures and pressures. However, when aerosolizing, misting, or heating these products, do not breathe vapor or mist. Use in a well ventilated area. Avoid contact with: Skin, eyes, clothing, shoes. Wash thoroughly after handling. Do not eat, drink, or smoke when using this product.

Conditions for Safe Storage, Including any Incompatibilities

Keep container tightly closed when not in use and during transport. Store containers in a cool, dry place. Do not pressurize, cut, weld, braze, solder, drill, or grind containers. Keep containers away from flame, sparks, static electricity, or other sources of ignition. Empty product containers may retain product residue and can be dangerous.

Incompatible Materials

Acids, oxidizing materials, reactive halogens.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits

Canada, OSHA, NIOSH, and ACGIH have not developed exposure limits for any of this product's components.

ACGIH - Threshold Limit Values - Biological Exposure Indices (BEI)

There are no biological limit values for any of this product's components.

Engineering Controls

Provide general ventilation. Where adequate general ventilation is unavailable, use process enclosures, local exhaust ventilation, or other engineering controls.

Individual Protection Measures, such as Personal Protective Equipment

Eye/face protection

Wear safety glasses. Additional protection like goggles, face shields, or respirators may be needed dependent upon anticipated use and concentrations of mists or vapors. Eye wash fountain and emergency showers are recommended. Contact lens use is not recommended.

Respiratory Protection

A respiratory protection program which meets USA's OSHA General Industry Standard 29 CFR 1910.134 or Canada's CSA Standard Z94.4-M1982 requirements must be followed whenever workplace conditions warrant a respirator's use. Consult a qualified Industrial Hygienist or Safety Professional for respirator selection guidance.

Glove Recommendations

Where skin contact is likely, wear chemical impervious protective gloves; use of natural rubber or equivalent gloves is not recommended. When products are heated and skin contact is likely, wear heat-resistant gloves, boots, and other protective clothing. To avoid prolonged or repeated contact where spills and splashes are likely, wear appropriate chemical-resistant faceshield, boots, apron, coveralls, long sleeve shirts, or other protective clothing.

Protective Materials

Personal protective equipment should be selected based upon the conditions under which this material is used. A hazard assessment of the work area for PPE requirements should be conducted by a qualified professional pursuant to regulatory requirements. The following PPE should be considered the minimum required: Safety glasses, gloves, and lab coat or apron.

Safety Data Sheet

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Amber liquid.	Physical State	Liquid
Odor	Petroleum odor.	Color	Amber
Odor Threshold	Not available	pH	Not available
Melting Point	Not available	Boiling Point	246 °C (475 °F Minimum)
Boiling Point Range	Not available	Freezing point	Not available
Evaporation Rate	Not available	Flammability (solid, gas)	Not available
Autoignition Temperature	Not available	Flash Point	195 °C (383 °F Minimum)
Lower Explosive Limit	Not available	Decomposition temperature	Not available
Upper Explosive Limit	Not available	Vapor Pressure	<0.1 mmHg @ 68°F °C (20° C)
Vapor Density (air=1)	Not available	Specific Gravity (water=1)	0.88 (Approximate Water = 1)
Water Solubility	(Insoluble)	Partition coefficient: n-octanol/water	Not available
Viscosity	>20.5mm ² /s @104°F	Solubility (Other)	Not available
Density	7.3 lb/gal (US Approximate)	Pour Point	-18 °C (0 °F Maximum)
VOC	Negligible as per U.S EPA 40 CFR 51.100(s)	Molecular Weight	Not available
OSHA Flammability Class	Not flammable		

Other Property Information No information available.

Section 10 - STABILITY AND REACTIVITY

Reactivity

No reactivity hazard is expected.

Chemical Stability

Stable under normal temperatures and pressures.

Possibility of Hazardous Reactions

Will not polymerize.

Conditions to Avoid

Avoid sparks, flame, and other sources of ignition.

Incompatible Materials

Avoid oxidizing agents, reducing agents, and/or acids.

Hazardous decomposition products

None under normal temperatures and pressures.

Safety Data Sheet

Section 11 - TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation

No information on significant adverse effects.

Skin Contact

Prolonged or repeated exposure may cause skin dryness or cracking.

Eye Contact

No information on significant adverse effects.

Ingestion

May be harmful if swallowed.

Acute and Chronic Toxicity

Component Analysis - LD50/LC50

The components of this material have been reviewed in various sources and the following selected endpoints are published:

Petroleum distillates, solvent-refined heavy paraffinic (64741-88-4)

Oral LD50 Rat >5000 mg/kg;Dermal LD50 Rabbit >2000 mg/kg;Inhalation LC50 Rat >5530 mg/m³ 4 h (no deaths occurred)

Residual oils, petroleum, solvent-refined (64742-01-4)

Oral LD50 Rat >5000 mg/kg;Dermal LD50 Rabbit >2000 mg/kg;Inhalation LC50 Rat 2.18 mg/L 4 h

Lubricating oils, petroleum, C>;25, hydrotreated bright stock-based (72623-83-7)

Oral LD50 Rat >5000 mg/kg

Residual oils (petroleum), solvent dewaxed (64742-62-7)

Oral LD50 Rat >5000 mg/kg;Dermal LD50 Rabbit >2000 mg/kg;Inhalation LC50 Rat 2.18 mg/L 4 h

Lubricating oils, petroleum, hydrotreated spent (64742-58-1)

Oral LD50 Rat >2000 mg/kg;Dermal LD50 Rabbit >4480 mg/kg

Lubricating oils, petroleum, C20-50, hydrotreated neutral oil-based (72623-87-1)

Oral LD50 Rat >5000 mg/kg;Dermal LD50 Rabbit >2000 mg/kg;Inhalation LC50 Rat 2.18 mg/L 4 h

Petroleum distillates, hydrotreated heavy naphthenic (64742-52-5)

Oral LD50 Rat >5000 mg/kg;Dermal LD50 Rabbit >2000 mg/kg

Product Toxicity Data

Acute Toxicity Estimate

Dermal	> 2000 mg/kg
Oral	> 2000 mg/kg

Immediate Effects

No information on significant adverse effects.

Delayed Effects

No information on significant adverse effects.

Irritation/Corrosivity Data

May cause slight skin and respiratory irritation.

Respiratory Sensitization

No information on significant adverse effects.

Dermal Sensitization

No information for the product.

Component Carcinogenicity

None of this product's components are listed by ACGIH, IARC, NTP, DFG or OSHA

Safety Data Sheet

Germ Cell Mutagenicity

No information available for the product.

Tumorigenic Data

No information available for the product.

Reproductive Toxicity

No data available for this product.

Specific Target Organ Toxicity - Single Exposure

No information on significant adverse effects.

Specific Target Organ Toxicity - Repeated Exposure

No target organs identified.

Aspiration hazard

No data available.

Medical Conditions Aggravated by Exposure

Individuals with pre-existing respiratory tract (nose, throat, and lungs), eye, and/or skin disorders may have increased susceptibility to the effects of exposure.

Section 12 - ECOLOGICAL INFORMATION
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Ecotoxicity

Harmful to aquatic life with long lasting effects.

Component Analysis - Aquatic Toxicity

Petroleum distillates, solvent-refined heavy paraffinic	64741-88-4
Fish:	LC50 96 h Oncorhynchus mykiss >5000 mg/L
Invertebrate:	EC50 48 h Daphnia magna >1000 mg/L IUCLID
Residual oils, petroleum, solvent-refined	64742-01-4
Fish:	LC50 96 h Oncorhynchus mykiss >5000 mg/L
Invertebrate:	EC50 48 h Daphnia magna >1000 mg/L IUCLID
Lubricating oils, petroleum, C>25, hydrotreated bright stock-based	72623-83-7
Fish:	LC50 96 h Lepomis macrochirus >10000 mg/L
Residual oils (petroleum), solvent dewaxed	64742-62-7
Fish:	LC50 96 h Oncorhynchus mykiss >5000 mg/L
Invertebrate:	EC50 48 h Daphnia magna >1000 mg/L IUCLID
Lubricating oils, petroleum, hydrotreated spent	64742-58-1
Fish:	LC50 96 h Brachydanio rerio 79.6 mg/L [semi-static]; LC50 96 h Pimephales promelas 3.2 mg/L [semi-static]

Safety Data Sheet

Lubricating oils, petroleum, C20-50, hydrotreated neutral oil-based	72623-87-1
Fish:	LC50 96 h Oncorhynchus mykiss >5000 mg/L
Invertebrate:	EC50 48 h Daphnia magna >1000 mg/L IUCLID
Petroleum distillates, hydrotreated heavy naphthenic	64742-52-5
Fish:	LC50 96 h Oncorhynchus mykiss >5000 mg/L
Invertebrate:	EC50 48 h Daphnia magna >1000 mg/L IUCLID
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	68649-42-3
Fish:	LC50 96 h Pimephales promelas 1 - 5 mg/L [static]; LC50 96 h Pimephales promelas 10 - 35 mg/L [semi-static]
Invertebrate:	EC50 48 h Daphnia magna 1 - 1.5 mg/L IUCLID

Persistence and Degradability

No information available for the product.

Bioaccumulative Potential

No information available for the product.

Mobility

No information available for the product.

Section 13 - DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose of contents/container in accordance with local/regional/national/international regulations.

Regulations may also apply to empty containers. The responsibility for proper waste disposal lies with the owner of the waste. Contact Safety-Kleen regarding proper recycling or disposal.

This product, if discarded, is not expected to be a characteristic or listed hazardous waste. If recycled in the USA, it can be managed in accordance with the used oil exemption under 40 CFR Part 279. Processing, use, or contamination by the user may change the waste code(s) applicable to the disposal of this product.

Section 14 - TRANSPORT INFORMATION

US DOT Information:

UN/NA #: Not regulated as a hazardous material.

IATA Information:

UN#: Not regulated as a hazardous material.

IMDG Information:

UN#: Not regulated as a hazardous material.

TDG Information:

UN#: Not regulated as a hazardous material.

International Bulk Chemical Code

Safety Data Sheet

This material does not contain any chemicals required by the IBC Code to be identified as dangerous chemicals in bulk.

Section 15 - REGULATORY INFORMATION
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U.S. Federal Regulations

None of this products components are listed under SARA Sections 302/304 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), or require an OSHA process safety plan.

SARA Section 311/312 (40 CFR 370 Subparts B and C)

Acute Health: Yes **Chronic Health:** Yes **Fire:** No **Pressure:** No **Reactivity:** No

Component Analysis - Inventory

Petroleum distillates, solvent-refined heavy paraffinic (64741-88-4), Residual oils, petroleum, solvent-refined (64742-01-4), Residual oils (petroleum), hydrotreated (64742-57-0), Lubricating oils, petroleum, C>25, hydrotreated bright stock-based (72623-83-7), Residual oils (petroleum), solvent dewaxed (64742-62-7), Lubricating oils, petroleum, hydrotreated spent (64742-58-1), Lubricating oils, petroleum, C20-50, hydrotreated neutral oil-based (72623-87-1), Petroleum distillates, hydrotreated heavy naphthenic (64742-52-5), Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts (68649-42-3)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2	KR - REACH CCA	CN	NZ	MX	TW
Yes	DSL	EIN	Yes	Yes	No	No	Yes	No	No	Yes	Yes	Yes	Yes

Gas oils, petroleum, vacuum, hydrocracked, hydroisomerized, hydrogenated, C15-30, branched and cyclic, high viscosity index (178603-64-0)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2	KR - REACH CCA	CN	NZ	MX	TW
Yes	DSL	No	No	No	No	No	No	No	No	Yes	No	No	Yes

Gas oils, petroleum, vacuum, hydrocracked, hydroisomerized, hydrogenated, C20-40, branched and cyclic, high viscosity index (178603-65-1), Gas oils, petroleum, vacuum, hydrocracked, hydroisomerized, hydrogenated, C25-55, branched and cyclic, high viscosity index (178603-66-2)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2	KR - REACH CCA	CN	NZ	MX	TW
Yes	DSL	No	No	No	No	No	No	No	No	Yes	No	No	Yes

Safety Data Sheet

Section 16 - OTHER INFORMATION

NFPA Ratings: Health: 1 Fire: 1 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

Summary of Changes

Revision to comply with WHMIS 2015.

Key / Legend **ACGIH** - American Conference of Governmental Industrial Hygienists; **ADR** - European Road Transport; **AU** - Australia; **BOD** - Biochemical Oxygen Demand; **C** - Celsius; **CA** - Canada; **CA/MA/MN/NJ/PA** - California/Massachusetts/Minnesota/New Jersey/Pennsylvania*; **CAS** - Chemical Abstracts Service; **CFR** - Code of Federal Regulations (US); **CERCLA** - Comprehensive Environmental Response, Compensation, and Liability Act; **CLP** - Classification, Labelling, and Packaging; **CN** - China; **CPR** - Controlled Products Regulations; **DFG** - Deutsche Forschungsgemeinschaft; **DOT** - Department of Transportation; **DSD** - Dangerous Substance Directive; **DSL** - Domestic Substances List; **EC** - European Commission; **EEC** - European Economic Community; **EIN** - European Inventory of (Existing Commercial Chemical Substances); **EINECS** - European Inventory of Existing Commercial Chemical Substances; **ENCS** - Japan Existing and New Chemical Substance Inventory; **EPA** - Environmental Protection Agency; **EU** - European Union; **F** - Fahrenheit; **IARC** - International Agency for Research on Cancer; **IATA** - International Air Transport Association; **ICAO** - International Civil Aviation Organization; **IDL** - Ingredient Disclosure List; **IDLH** - Immediately Dangerous to Life and Health; **IMDG** - International Maritime Dangerous Goods; **ISHL** - Japan Industrial Safety and Health Law; **IUCLID** - International Uniform Chemical Information Database; **JP** - Japan; **Kow** - Octanol/water partition coefficient; **KECI** - Korea Existing Chemicals Inventory; **KECL** - Korea Existing Chemicals List; **KR** - Korea; **LD50/LC50** - Lethal Dose/ Lethal Concentration; **LEL** - Lower Explosive Limit; **LLV** - Level Limit Value; **LOLI** - List Of Lists™ - ChemADVISOR's Regulatory Database; **MAK** - Maximum Concentration Value in the Workplace; **MEL** - Maximum Exposure Limits; **MX** - Mexico; **NDSL** - Non-Domestic Substance List (Canada); **NFPA** - National Fire Protection Agency; **NIOSH** - National Institute for Occupational Safety and Health; **NJTSSR** - New Jersey Trade Secret Registry; **NTP** - National Toxicology Program; **NZ** - New Zealand; **OSHA** - Occupational Safety and Health Administration; **PEL** - Permissible Exposure Limit; **PH** - Philippines; **RCRA** - Resource Conservation and Recovery Act; **REACH** - Registration, Evaluation, Authorisation, and restriction of Chemicals; **RID** - European Rail Transport; **SARA** - Superfund Amendments and Reauthorization Act; **STEL** - Short-term Exposure Limit; **TCCA** - Korea Toxic Chemicals Control Act; **TDG** - Transportation of Dangerous Goods; **TLV** - Threshold Limit Value; **TSCA** - Toxic Substances Control Act; **TW** - Taiwan; **TWA** - Time Weighted Average; **UEL** - Upper Explosive Limit; **UN/NA** - United Nations /North American; **US** - United States; **VLE** - Exposure Limit Value (Mexico); **WHMIS** - Workplace Hazardous Materials Information System (Canada).

Other Information

Disclaimer: User assumes all risks incident to the use of this product. To the best of our knowledge, the information contained herein is accurate. However, Safety-Kleen assumes no liability whatsoever for the accuracy or completeness of the information contained herein. No representations or warranties, either expressed or implied, of merchantability, fitness for a particular purpose or of any other nature are made hereunder with respect to the information or the product to which the information refers. The data contained on this sheet apply to the product as supplied to the user.



California CARB Compliant

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Flammable Aerosol Category 1
Gas Under Pressure: Compressed Gas
Aspiration Toxicity Category 1
Specific Target Organ Toxicity Single Exposure Category 3 (nervous system effects)

Note: This product is a consumer product and is labeled in accordance with the US Consumer Product Safety Commission regulations which take precedence over OSHA Hazard Communication labeling. The actual container label will not include the label elements below. The labeling below applies to industrial/professional products.



!
Extremely Flammable Aerosol.
Contains gas under pressure; may explode if heated.
May be fatal if swallowed and enters airways.
May cause drowsiness or dizziness.

Keep away from heat, sparks, open flames, hot surfaces. – No smoking.
Do not spray on an open flame or other ignition source.
Pressurized container: Do not pierce or burn, even after use.
Avoid breathing vapors or mists.
Use only outdoors or in a well-ventilated area.

IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting.
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.

Store locked up.
Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Store in a well-ventilated place.

Dispose of contents and container in accordance with local and national regulations.

LVP Aliphatic Hydrocarbon	64742-47-8	45-50%	Aspiration Toxicity Category 1
Petroleum Base Oil	64742-56-9 64742-65-0 64742-53-6 64742-54-7 64742-71-8	<35%	Not Hazardous
Aliphatic Hydrocarbon	64742-47-8	<25%	Flammable Liquid Category 3 Aspiration Toxicity Category 1 Specific Target Organ Toxicity Single Exposure Category 3 (nervous system effects)
Carbon Dioxide	124-38-9	2-3%	Simple Asphyxiant Gas Under Pressure, Compressed Gas

Note: The specific chemical identity and exact percentages are a trade secret.

-

Aspiration Hazard. DO NOT induce vomiting. Call physician, poison control center or the WD-40 Safety Hotline at 1-888-324-7596 immediately.

Flush thoroughly with water. Remove contact lenses if present after the first 5 minutes and continue flushing for several more minutes. Get medical attention if irritation persists.

Wash with soap and water. If irritation develops and persists, get medical attention.

If irritation is experienced, move to fresh air. Get medical attention if irritation or other symptoms develop and persist.

Harmful or fatal if swallowed. Aspiration of liquid into the lungs during swallowing or vomiting may cause lung damage. May cause eye and respiratory irritation. Inhalation of mists or vapors may cause drowsiness, dizziness and other nervous system effects. Skin contact may cause drying of the skin.

Immediate medical attention is needed for ingestion.

-

Use water fog, dry chemical, carbon dioxide or foam. Do not use water jet or flooding amounts of water. Burning product will float on the surface and spread fire.

Extremely flammable aerosol. Contents under pressure.

Keep away from ignition sources and open flames. Exposure of containers to extreme heat and flames can cause them to rupture often with violent force. Vapors are heavier than air and may travel along surfaces to remote ignition sources and flash back. Combustion will produce oxides of carbon and hydrocarbons.

Firefighters should always wear positive pressure self-contained breathing apparatus and full protective clothing. Cool fire-exposed containers with water. Use shielding to protect against bursting containers.

-

Wear appropriate protective clothing (see Section 8). Eliminate all sources of ignition and ventilate area.

Leaking cans should be placed in a plastic bag or open pail until the pressure has dissipated. Contain and collect liquid with an inert absorbent and place in a container for disposal. Clean spill area thoroughly. Report spills to authorities as required.

-

Avoid contact with eyes. Avoid prolonged contact with skin. Avoid breathing vapors or aerosols. Use only with adequate ventilation. Keep away from heat, sparks, pilot lights, hot surfaces and open flames. Unplug electrical tools, motors and appliances before spraying or bringing the can near any source of electricity. Electricity can burn a hole in the can and cause contents to burst into flames. To avoid serious burn injury, do not let the can touch battery terminals, electrical connections on motors or appliances or any other source of electricity. Wash thoroughly with soap and water after handling. Keep containers closed when not in use. Keep out of the reach of children. Do not puncture, crush or incinerate containers, even when empty.

Store in a cool, well-ventilated area, away from incompatible materials. Do not store above 120°F or in direct sunlight. U.F.C (NFPA 30B) Level 3 Aerosol. Store away from oxidizers.

LVP Aliphatic Hydrocarbon	1200 mg/m3 TWA (manufacturer recommended)
Petroleum Base Oil	5 mg/m3 TWA (Inhalable) ACGIH TLV (as Mineral oil) 5 mg/m3 TWA OSHA PEL (as Oil mist, mineral)
Aliphatic Hydrocarbon	1200 mg/m3 TWA (manufacturer recommended)
Carbon Dioxide	5000 ppm TWA, 30,000 ppm STEL ACGIH TLV 5000 ppm TWA OSHA PEL

Use in a well-ventilated area.

Avoid eye contact. Always spray away from your face.
Avoid prolonged skin contact. Chemical resistant gloves recommended for operations where skin contact is likely.
None needed for normal use with adequate ventilation.

Use adequate general and local exhaust ventilation to maintain exposure levels below that occupational exposure limits.

Safety goggles recommended where eye contact is possible.
Wear chemical resistant gloves.
None required if ventilation is adequate. If the occupational exposure limits are exceeded, wear a NIOSH approved respirator. Respirator selection and use should be based on contaminant type, form and concentration. Follow OSHA 1910.134, ANSI Z88.2 and good Industrial Hygiene practice.
Wash with soap and water after handling.

Appearance:	Light green to amber liquid	Flammable Limits: (Solvent Portion)	LEL: 0.6% UEL: 8%
Odor:	Mild petroleum odor	Vapor Pressure:	95-115 PSI @ 70°F
Odor Threshold:	Not established	Vapor Density:	Greater than 1 (air=1)
pH:	Not Applicable	Relative Density:	0.8 – 0.82 @ 60°F
Melting/Freezing Point:	Not established	Solubilities:	Insoluble in water
Boiling Point/Range:	361 - 369°F (183 - 187°C)	Partition Coefficient; n-octanol/water:	Not established
Flash Point:	138°F (59°C) Tag Closed Cup (liquid)	Autoignition Temperature:	Not established
Evaporation Rate:	Not established	Decomposition Temperature:	Not established
Flammability (solid, gas):	Flammable Aerosol	Viscosity:	2.79-2.96 cSt @ 100°F
VOC:	24.1%	Pour Point:	-63°C (-81.4°F) ASTM

	MIR=0.43gO3/gVOC		D-97
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 Not reactive under normal conditions
 Stable
 May react with strong oxidizers generating heat.
 Avoid heat, sparks, flames and other sources of ignition. Do not puncture or incinerate containers.
 Strong oxidizing agents.
 Carbon monoxide and carbon dioxide.

-
 High concentrations may cause nasal and respiratory irritation and central nervous system effects such as headache, dizziness and nausea. Intentional abuse may be harmful or fatal.
 Prolonged and/or repeated contact may produce mild irritation and defatting with possible dermatitis.
 Contact may be irritating to eyes. May cause redness and tearing.
 This product has low oral toxicity. Swallowing may cause gastrointestinal irritation, nausea, vomiting and diarrhea. This product is an aspiration hazard. If swallowed, can enter the lungs and may cause chemical pneumonitis, severe lung damage and death.
 None expected.
 None of the components are listed as a carcinogen or suspect carcinogen by IARC, NTP, ACGIH or OSHA.
 : None of the components is considered a reproductive hazard.
 Acute Toxicity Estimates: Oral > 5,000 mg/kg; Dermal >2,000 mg/kg based on an assessment of the ingredients. This product is not classified as toxic by established criteria. It is an aspiration hazard.

-
 No specific aquatic toxicity data is currently available; however components of this product are not expected to be harmful to aquatic organisms
 Components are readily biodegradable.
 Bioaccumulation is not expected based on an assessment of the ingredients.
 No data available
 None known

If this product becomes a waste, it would be expected to meet the criteria of a RCRA ignitable hazardous waste (D001). However, it is the responsibility of the generator to determine at the time of disposal the proper classification and method of disposal. Do not puncture or incinerate containers, even empty. Dispose in accordance with federal, state, and local regulations.

-
 DOT Surface Shipping Description: UN1950, Aerosols, 2.1 Ltd. Qty
 (Note: Shipping Papers are not required for Limited Quantities unless transported by air or vessel – each package must be marked with the Limited Quantity Mark)
 IMDG Shipping Description: UN1950, Aerosols, 2.1, LTD QTY
 ICAO Shipping Description: UN1950, Aerosols, flammable, 2.1
 NOTE: WD-40 Company does not test aerosol cans to assure that they meet the pressure and other requirements for transport by air. We do not recommend that our aerosol products be transported by air.

-

This product is not subject to CERCLA reporting requirements, however, oil spills are reportable to the National Response Center under the Clean Water Act and many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

Refer to Section 2 for the OSHA Hazard Classification.

This product contains the following chemicals subject to SARA Title III Section 313 Reporting requirements: None

None
All of the components of this product are listed on the

TSCA inventory.

This product does not require a California Proposition 65 warning.

This product complies with the consumer product VOC limits of CARB, the US EPA and states adopting the OTC VOC rules.

All of the ingredients are listed on the Canadian Domestic Substances List or exempt from notification

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Revision Date: August 2, 2021

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Supersedes: March 5, 2019

Revision Summary: Section 9: Appearance

Prepared by: Industrial Health & Safety Consultants, Inc. Shelton, CT, USA

Reviewed by: I. Kowalski

Regulatory Affairs Dept.

1012200/No.0084706



WD-40 Specialist® Dirt & Dust Resistant Dry Lube Cleaner, Lubricant None identified October 25, 2019	WD-40 Products [Canada] Ltd. P.O. Box 220 Toronto, Ontario M9C 4V3 _____ (416) 622-9881 _____ Canutec: (613) 996- 6666 - Designated for use only in the event of chemical emergencies involving a spill, leak, fire exposure or accident involving chemicals
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Flammable Aerosol Category 1
Gas Under Pressure: Compressed Gas
Aspiration Toxicity Category 1
Skin Irritant Category 2
Specific Target Organ Toxicity Single Exposure Category 3 (nervous system effects)

Note: This product is a consumer product and is labeled in accordance with the Consumer Chemicals and Containers Regulations (CCCR) which take precedence over WHMIS 2015 labeling. The actual container label will not include the label elements below. The labeling below applies to industrial/professional products.



!
Extremely Flammable Aerosol.
Contains gas under pressure; may explode if heated.
May be fatal if swallowed and enters airways.
Causes skin irritation.
May cause drowsiness or dizziness.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Do not spray on an open flame or other ignition source.
Do not pierce or burn, even after use.
Wash thoroughly after handling.
Avoid breathing vapors or mists.
Use only outdoors or in a well-ventilated area.
Wear protective gloves.

IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting.
IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical attention. Take off contaminated clothing and wash it before reuse.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.

Store locked up.

Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Store in a well-ventilated place.

Dispose of contents and container in accordance with local and national regulations.

Heptane	64742-49-0 142-82-5	70-80%	Aspiration Toxicity Category 1 Flammable Liquid Category 2 Skin Irritant Category 2 Specific Target Organ Toxicity Single Exposure Category 3 (nervous system effects)
Propane Propellant	74-98-6	10-20%	Flammable Gas Category 1 Gas Under Pressure, Compressed Gas
Petroleum Solvent	64741-66-8 64742-47-8	5-10%	Flammable Liquid, Category 2 Aspiration Toxicity Category 1
Mineral Oil	Proprietary	1-5%	Not Hazardous

Aspiration Hazard. DO NOT induce vomiting. Call physician, poison control center or the WD-40 Safety Hotline at 1-888-324-7596 immediately.

Flush thoroughly with water. Remove contact lenses if present after the first 5 minutes and continue flushing for several more minutes. Get medical attention if irritation persists.

Wash with soap and water. If irritation develops and persists, get medical attention.

If irritation is experienced, move to fresh air. Get medical attention if irritation or other symptoms develop and persist.

Harmful or fatal if swallowed. If swallowed, may be aspirated and cause lung damage. May cause eye and respiratory irritation. Inhalation may cause coughing, headache and dizziness. Skin contact may cause drying of the skin.

Immediate medical attention is needed for ingestion.

Use water fog, dry chemical, carbon dioxide or foam. Do not use water jet or flooding amounts of water. Burning product will float on the surface and spread fire.

Contents under pressure. Extremely flammable aerosol.

Keep away from ignition sources and open flames. Exposure of containers to extreme heat and flames can cause them to rupture often with violent force. Vapors can cause a flash fire. Vapors are heavier than air and may travel along surfaces to remote ignition sources and flash back. Combustion will produce oxides of carbon, smoke fumes, unburned hydrocarbons and small amounts of hydrogen fluoride and carbonyl fluoride. A vapor and air mixture can create an explosion hazard in confined spaces.

Firefighters should always wear positive pressure self-contained breathing apparatus and full protective clothing. Cool fire-exposed containers with water. Use shielding to protect against bursting containers.

Wear appropriate protective clothing (see Section 8). Eliminate all sources of ignition and ventilate area.

Leaking cans should be placed in a plastic bag or open pail until the pressure has dissipated. Contain and collect liquid with an inert absorbent and place in a container for disposal. Clean spill area thoroughly. Report spills to authorities as required.

Avoid contact with eyes. Avoid prolonged contact with skin. Avoid breathing vapors or aerosols. Use only with adequate ventilation. Keep away from heat, sparks, pilot lights, hot surfaces and open flames. Unplug electrical tools, motors and appliances before spraying or bringing the can near any source of electricity. Electricity can burn a hole in the can and cause contents to burst into flames. To avoid serious burn injury, do not let the can touch battery terminals, electrical connections on motors or appliances or any other source of electricity. Wash thoroughly with soap and water after handling. Keep containers closed when not in use. Keep out of the reach of children. Do not puncture, crush or incinerate containers, even when empty. Intentional misuse by deliberately concentrating vapors and inhaling can be harmful or fatal.

Store in a cool, well-ventilated area, away from incompatible materials Do not store above 120°F or in direct sunlight. U.F.C (NFPA 30B) Level 3 Aerosol. Store away from oxidizers.

Heptane	400 ppm TWA, 500 ppm STEL ACGIH TLV 400 ppm TWA, 500 ppm STEL Canada-Ontario 400 ppm TWA, 500 ppm STEL Canada- Québec 400 ppm TWA, 500 ppm STEL British Columbia
Propane Propellant	1000 ppm TWA Canada-Ontario (as Hydrocarbons, aliphatic (gaseous) C1-C4) 1000 ppm TWA Canada-Québec 1000 ppm TWA British Columbia
Petroleum Solvent	1400 mg/m3 TWA Supplier Recommended (total hydrocarbon)
Mineral Oil	5 mg/m3 (inhalable) TWA ACGIH TLV (as mineral oil) 5 mg/m3 TWA, 10 mg/m3 STEL Canada-Ontario (as oil mist, mineral) 5 mg/m3 TWA, 10 mg/m3 STEL Canada-Québec (as oil mist, mineral) 1 mg/m3 TWA British Columbia (as Oil mist-mineral, severely refined)

Use in a well-ventilated area.

Avoid eye contact. Always spray away from your face.
Avoid prolonged skin contact. Chemical resistant gloves recommended for operations where skin contact is likely.
None needed for normal use with adequate ventilation.

Use adequate general and local exhaust ventilation to maintain exposure levels below that occupational exposure limits.

Safety goggles recommended where eye contact is possible.
Wear chemical resistant gloves.
None required if ventilation is adequate. If the occupational exposure limits are exceeded, wear a NIOSH approved respirator. Respirator selection and use should be based on contaminant type, form and concentration. Follow applicable regulations and good Industrial Hygiene practice.
Wash with soap and water after handling.

Appearance:	Clear liquid	Flammable Limits:	LEL: 0.9% UEL: 9.5%
Odor:	Pleasant odor	Vapor Pressure:	40-50 psi @ 70°F

Odor Threshold:	Not established	Vapor Density:	Greater than 1 (air=1)
pH:	Not Applicable	Relative Density:	0.72
Melting/Freezing Point:	Not established	Solubilities:	Insoluble in water
Boiling Point/Range:	90-140°C (194-284°F)	Partition Coefficient; n-octanol/water:	Not established
Flash Point:	<-29.2°F Tag Closed Cup	Autoignition Temperature:	Not established
Evaporation Rate:	Not established	Decomposition Temperature:	Not established
Flammability (solid, gas):	Flammable Aerosol	Viscosity:	Not established
VOC:	93.2%	Pour Point:	Not established

-

Not reactive under normal conditions
Stable

May react with strong oxidizers generating heat.
Avoid heat, sparks, flames and other sources of ignition. Do not puncture or incinerate containers.

Strong oxidizing agents.
Carbon monoxide and carbon dioxide, smoke fumes, unburned hydrocarbons and small amounts of hydrogen fluoride and carbonyl fluoride.

-

Mist or vapor can irritate the throat and lungs. High concentrations may cause nasal and respiratory irritation and central nervous system effects such as headache, dizziness and nausea. Intentional abuse may be harmful or fatal.

May cause skin irritation with short-term exposure with redness, itching and burning of the skin. Prolonged and/or repeated contact may produce defatting and possible dermatitis.

Contact may be irritating to eyes. May cause redness, stinging, swelling and tearing.

This product has low oral toxicity. If swallowed, this material may cause irritation of the mouth, throat and esophagus. Swallowing may cause gastrointestinal irritation, nausea, vomiting, diarrhea, dizziness, drowsiness and other central nervous system effects. This product is an aspiration hazard. If swallowed, can enter the lungs and may cause chemical pneumonitis, severe lung damage and death.

Prolonged or repeated skin contact may defeat the skin resulting in irritation and dermatitis.

None of the components are listed as a carcinogen or suspect carcinogen by IARC, NTP, ACGIH or OSHA.

None of the components is considered a reproductive hazard.

The oral toxicity of this product is estimated to be greater than 2,000 mg/kg and the dermal toxicity greater than 2,000 mg/kg based on an assessment of the ingredients. This product is not classified as toxic by established criteria. It is an aspiration hazard.

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Heptane: 24 hr LC50 Goldfish – 4 mg/L; 24 hr EC50 Daphnia magna – >10 mg/L
Petroleum Solvent: No ecotoxicity data available. Ingredient is expected to be toxic to the aquatic environment with long-term adverse effects.

Components are not readily biodegradable.
Bioaccumulation is not expected based on an assessment of the ingredients.

No data available
None known

Aerosol containers should not be punctured, compacted in home trash compactors or incinerated. Empty containers may be disposed of through normal waste management options. Dispose of all waste product, absorbents, and other materials in accordance with applicable Federal, state and local regulations.

DOT Surface Shipping Description: UN1950, Aerosols, 2.1 Ltd. Qty
(Note: Shipping Papers are not required for Limited Quantities unless transported by air or vessel – each package must be marked with the Limited Quantity Mark)
Canadian TDG Classification: Limited Quantity
IMDG Shipping Description: UN1950, Aerosols, 2.1, LTD QTY
ICAO Shipping Description: UN1950, Aerosols, flammable, 2.1

*Note: Inner packages with less than 5 liters of liquid/ 5 kg of solid are exempt from Marine Pollutant per IMDG Code 2.10.2.7 and ICAO Special Provision A197.

NOTE: WD-40 Company does not test aerosol cans to assure that they meet the pressure and other requirements for transport by air. We do not recommend that our aerosol products be transported by air.

This product contains the following chemicals that are listed on the NPRI Substance List: Heptane (all isomers) 70-80%, Propane (74-98-6) 10-20%, Petroleum Solvent (64742-47-8) 5-10%

All of the ingredients are listed on the Canadian Domestic Substances List or exempt from notification.

Revision Date: October 25, 2019

Supersedes: September 21, 2016

Prepared by: Industrial Health & Safety Consultants, Inc. Shelton, CT, USA

Reviewed by: I. Kowalski

Regulatory Affairs Department

1015200/No.0086404

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SuperClean Brands, Inc.
 51 East Maryland Avenue
 St. Paul, MN 55117-4615

(651) 489-8211

(651) 489-8247

1-800-535-5053

June 26, 2009

Windshield Washer Fluid

Used for cleaning windshields

Windshield Washer Fluid

Hazardous Component*	Approximate Composition	OSHA Permissible Exposure Limit**	NIOSH REL	ACGIH Threshold Limit Value	IDLH (NIOSH)
Methanol (Methyl Alcohol) -CAS 67-56-1 -UN 1230 (DOT Guide 28)	<1 percent by weight	200 ppm (260 mg/m ³) 8-Hour TWA (Skin)	200 ppm (260 mg/m ³) 8-Hour TWA 250 ppm (310 mg/m ³) Ceiling (Skin)	200 ppm (260 mg/m ³) 8-Hour TWA 250 ppm (310 mg/m ³) Short-term Exposure Limit (15-minute TWA) (Skin)	6,000 ppm (0.6 percent in air)

* The hazardous component listed is not a known or suspected human carcinogen as listed or determined by the National Agency for Research on Cancer, National Toxicological Program "NTP Seventh Annual Report on Carcinogens," or International Agency for Research on Cancer (IARC) monograph reviews. In addition, it is not considered a carcinogen by the Occupational Safety and Health Administration or the National Institute for Occupational Safety and Health.

** This MSDS contains the 1989 PEL's and from the June 1993 Air Contaminants Final Rule, specified in Tables Z-1, Z-2, and Z-3 [Federal Register; 58(124):35338-35351; June 30, 1993].

Approximately 200°F (for product)

200F

Soluble

20mm @ 90° (methanol)

1.11 (methanol)

10.84 cV (methanol)

+32°F

The windshield washer is blue, and it has a mild characteristic pungent odor from the methanol. The odor threshold for methanol is 10 ppm.

UEL - 36 percent for methanol LEL - 6 percent for methanol

878°F for methanol

Small Fires: Dry chemical, carbon dioxide, water spray or alcohol resistant foam.

Large Fires: Water spray, fog or alcohol-resistant foam.

Move container away from fire area if you can do so without risk. Dike fire control water for later disposal; do not scatter the material. Apply cooling water to the sides of containers exposed to flames until well after the fire is out.

Flammable/combustible material; may be ignited by heat, spark or flame. Vapors may travel to a source of ignition and flash back. Container may explode in heat of fire. Vapor explosion and poison hazard indoors, outdoors, or in sewers. Runoff to sewer may create fire or explosion hazard.

In a closed container, methyl alcohol is stable at room temperature and it is stable under routine handling and storage. Hazardous polymerization will not occur.

Incompatible with beryllium dihydride; metals; oxidants; potassium tert-butoxide; carbon tetrachloride + metals; dichloromethane. Can react vigorously with oxidizing materials.

Explosive reaction with chloroform + sodium methoxide; diethyl zinc. Violent reaction with alkyl aluminum salts; acetylene bromide; chloroform + sodium hydroxide; CrO₃; cyanuric chloride; (I + ethanol + HgO); Pb(ClO₄)₂; HClO₄; P₂O₃; (KOH + CHCl₂); nitric acid¹

When methanol is heated to decomposition, carbon dioxide and carbon monoxide may be produced, as well as formaldehyde may be produced, and it emits acrid smoke and irritating fumes.

¹Lewis, Richard J., Sr.: *Sax's Dangerous Properties of Industrial Materials, Eighth Edition*. New York, New York: Van Nostrand Reinhold, 1992.

The primary routes of entry are inhalation, ingestion, and absorption.

Irritant to eyes, skin, and upper respiratory system. Headaches, drowsiness, dizziness, vertigo, light-headed, nausea, and vomiting. Visual disturbance, optic nerve damage, and blindness. Skin exposure hazard.

Central nervous system, digestive tract, eyes, and skin.

Eye irritation. Inhalation can result nose irritation, headache, fatigue, nausea, visual impairment or complete and possible blindness, acidosis, convulsions, circulatory collapse, respiratory fatigue, and death. Ingestion can cause gastrointestinal (GI) irritation followed by the symptoms described for inhalation and possible kidney impairment. Skin contact results in a cold sensation, dryness, and cracking, possibly leading to dermatitis. Methyl alcohol may be absorbed through the skin and may cause headache, fatigue, and visual disturbances. Eye contact results in irritation with lacrimation, inflamed lids, and photophobia.

Chronic exposure may result in visual impairment or blindness.

Ocular, respiratory, or dermal disorders may be aggravated by methanol exposure.

Eyes:	Rinse with water 15 to 20 minutes, seek medical assistance.
Skin:	Flush with water for 15 minutes.
Inhalation:	Remove from source to fresh air, provide respiratory support as needed.
Ingestion:	Call Physician, hospital emergency room or Poison Control Center immediately.

- Keep unnecessary people away; isolate hazard area and deny entry.
- Stay upwind; keep out of low areas.
- Shut off ignition sources; no flares, smoking or flames in hazard area.
- Positive pressure self-contained breathing apparatus and chemical protective clothing is recommended for personnel involved in clean-up procedures with no fire.
- Do not walk through spilled material; stop leak if it can be done without risk.
- Water spray may reduce vapor; but it will not prevent ignition in closed spaces.

Dispose of in accordance with federal, state and local regulations.



Under normal use conditions (outdoor windshield cleaning), respiratory protection is not justified.

Splash goggles are recommended when handling the solution. Contact lens use is not recommended.

The selection of protective clothing and gloves is dependent upon anticipated exposure. As reported by the manufacturer, Best Glove style 725R (PVC) offers excellent protection for up to 240 minutes of complete immersion.



The Occupational Safety and Health Administration's Permissible Exposure Limit, which is defined as the maximum concentration of contaminant to which a normal healthy individual may be exposed 8-hours per day, 40-hours per week, without experiencing adverse health effects over a working lifetime.

American Conference of Governmental Industrial Hygienist's Threshold Limit Value, similar to the OSHA PEL but not considered a legal standard.



Not Regulated

Maxim Technologies, Inc.

Judgements as to the suitability herein for the user's purposes are necessarily the user's responsibility. Therefore, although reasonable care has been taken in the preparation of such information, Maxim Technologies, Inc., extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to the intended purposes or for the consequences of its use.

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SuperClean Brands, Inc.
 51 East Maryland Avenue
 St. Paul, MN 55117-4615

(651) 489-8211

(651) 489-8247

1-800-535-5053

Windshield Washer Fluid

Used for cleaning windshields

Windshield Washer Fluid

Hazardous Component*	Approximate Composition	OSHA Permissible Exposure Limit**	NIOSH REL	ACGIH Threshold Limit Value	IDLH (NIOSH)
Methanol (Methyl Alcohol) -CAS 67-56-1 -UN 1230 (DOT Guide 28)	< 10 by weight	200 ppm (260 mg/m ³) 8-Hour TWA (Skin)	200 ppm (260 mg/m ³) 8-Hour TWA 250 ppm (310 mg/m ³) Ceiling (Skin)	200 ppm (260 mg/m ³) 8-Hour TWA 250 ppm (310 mg/m ³) Short-term Exposure Limit (15-minute TWA) (Skin)	6,000 ppm (0.6 percent in air)

* The hazardous component listed is not a known or suspected human carcinogen as listed or determined by the National Agency for Research on Cancer, National Toxicological Program "NTP Seventh Annual Report on Carcinogens," or International Agency for Research on Cancer (IARC) monograph reviews. In addition, it is not considered a carcinogen by the Occupational Safety and Health Administration or the National Institute for Occupational Safety and Health.

** This MSDS contains the 1989 PEL's and from the June 1993 Air Contaminants Final Rule, specified in Tables Z-1, Z-2, and Z-3 [Federal Register; 58(124):35338-35351; June 30, 1993].

Approximately 200°F (for product)
Soluble

150°F

1.11 (methanol)

100mm @ 21.2°F (methanol)

+22°F

10.84 cV (methanol)

The windshield washer is blue, and it has a mild characteristic pungent odor from the methanol. The odor threshold for methanol is 10 ppm.

UEL - 36 percent for methanol LEL - 6 percent for methanol

878°F for methanol

Small Fires: Dry chemical, carbon dioxide, water spray or alcohol resistant foam.

Large Fires: Water spray, fog or alcohol-resistant foam.

Move container away from fire area if you can do so without risk. Dike fire control water for later disposal; do not scatter the material. Apply cooling water to the sides of containers exposed to flames until well after the fire is out.

Flammable/combustible material; may be ignited by heat, spark or flame. Vapors may travel to a source of ignition and flash back. Container may explode in heat of fire. Vapor explosion and poison hazard indoors, outdoors, or in sewers. Runoff to sewer may create fire or explosion hazard.

In a closed container, methyl alcohol is stable at room temperature and it is stable under routine handling and storage. Hazardous polymerization will not occur.

Incompatible with beryllium dihydride; metals; oxidants; potassium tert-butoxide; carbon tetrachloride + metals; dichloromethane. Can react vigorously with oxidizing materials.

Explosive reaction with chloroform + sodium methoxide; diethyl zinc. Violent reaction with alkyl aluminum salts; acetylene bromide; chloroform + sodium hydroxide; CrO₃; cyanuric chloride; (I + ethanol + HgO); Pb(ClO₄)₂; HClO₄; P₂O₃; (KOH + CHCl₂); nitric acid¹

When methanol is heated to decomposition, carbon dioxide and carbon monoxide may be produced, as well as formaldehyde may be produced, and it emits acrid smoke and irritating fumes.

¹Lewis, Richard J., Sr.: *Sax's Dangerous Properties of Industrial Materials, Eighth Edition*. New York, New York: Van Nostrand Reinhold, 1992.

The primary routes of entry are inhalation, ingestion, and absorption.

Irritant to eyes, skin, and upper respiratory system. Headaches, drowsiness, dizziness, vertigo, light-headed, nausea, and vomiting. Visual disturbance, optic nerve damage, and blindness. Skin exposure hazard.

Central nervous system, digestive tract, eyes, and skin.

Eye irritation. Inhalation can result nose irritation, headache, fatigue, nausea, visual impairment or complete and possible blindness, acidosis, convulsions, circulatory collapse, respiratory fatigue, and death. Ingestion can cause gastrointestinal (GI) irritation followed by the symptoms described for inhalation and possible kidney impairment. Skin contact results in a cold sensation, dryness, and cracking, possibly leading to dermatitis. Methyl alcohol may be absorbed through the skin and may cause headache, fatigue, and visual disturbances. Eye contact results in irritation with lacrimation, inflamed lids, and photophobia.

Chronic exposure may result in visual impairment or blindness.

Ocular, respiratory, or dermal disorders may be aggravated by methanol exposure.

Eyes:	Rinse with water 15 to 20 minutes, seek medical assistance.
Skin:	Flush with water for 15 minutes.
Inhalation:	Remove from source to fresh air, provide respiratory support as needed.
Ingestion:	Call Physician, hospital emergency room or Poison Control Center immediately.

- Keep unnecessary people away; isolate hazard area and deny entry.
- Stay upwind; keep out of low areas.
- Shut off ignition sources; no flares, smoking or flames in hazard area.
- Positive pressure self-contained breathing apparatus and chemical protective clothing is recommended for personnel involved in clean-up procedures with no fire.
- Do not walk through spilled material; stop leak if it can be done without risk.
- Water spray may reduce vapor; but it will not prevent ignition in closed spaces.

Dispose of in accordance with federal, state and local regulations.

RCRA Hazardous Waste (40 CFR 261.33): Hazardous Waste No. U154
CERCLA Hazardous Substance (40 CFR 302.4): Not Listed
SARA Extremely Hazardous Substance (40 CFR 355): Not Listed
SARA Toxic Chemical (40 CFR 372.65): Not Listed



Under normal use conditions (outdoor windshield cleaning), respiratory protection is not justified.

Splash goggles are recommended when handling the solution. Contact lens use is not recommended.

The selection of protective clothing and gloves is dependent upon anticipated exposure. As reported by the manufacturer, Best Glove style 725R (PVC) offers excellent protection for up to 240 minutes of complete immersion.



The Occupational Safety and Health Administration's Permissible Exposure Limit, which is defined as the maximum concentration of contaminant to which a normal healthy individual may be exposed 8-hours per day, 40-hours per week, without experiencing adverse health effects over a working lifetime.

American Conference of Governmental Industrial Hygienist's Threshold Limit Value, similar to the OSHA PEL but not considered a legal standard.



In Inner Packaging not over 5 l (1.3 gallons) CONSUMER COMMODITY, ORM-D
Per 49 CFR 173.150 (b) (3) & 173.150 (c)

Maxim Technologies, Inc.

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SuperClean Brands, Inc.
 51 East Maryland Avenue
 St. Paul, MN 55117-4615

(651) 489-8211
 (651) 489-8247

1-800-535-5053

April 7, 2009

Windshield Washer Fluid

Used for cleaning windshields

Windshield Washer Fluid

Hazardous Component*	Approximate Composition	OSHA Permissible Exposure Limit**	NIOSH REL	ACGIH Threshold Limit Value	IDLH (NIOSH)
Methanol (Methyl Alcohol) -CAS 67-56-1 -UN 1230 (DOT Guide 28)	31 percent by weight	200 ppm (260 mg/m ³) 8-Hour TWA (Skin)	200 ppm (260 mg/m ³) 8-Hour TWA 250 ppm (310 mg/m ³) Ceiling (Skin)	200 ppm (260 mg/m ³) 8-Hour TWA 250 ppm (310 mg/m ³) Short-term Exposure Limit (15-minute TWA) (Skin)	6,000 ppm (0.6 percent in air)

* The hazardous component listed is not a known or suspected human carcinogen as listed or determined by the National Agency for Research on Cancer, National Toxicological Program "NTP Seventh Annual Report on Carcinogens," or International Agency for Research on Cancer (IARC) monograph reviews. In addition, it is not considered a carcinogen by the Occupational Safety and Health Administration or the National Institute for Occupational Safety and Health.

** This MSDS contains the 1989 PEL's and from the June 1993 Air Contaminants Final Rule, specified in Tables Z-1, Z-2, and Z-3 [Federal Register; 58(124): 35338-35351; June 30, 1993].

Approximately 170°F (for product)

93°F

Soluble

100 (mm Mercury) @ 21.2°F

1.11 (methanol)

10.84 cV (methanol)

-20°F

The windshield washer is blue, and it has a mild characteristic pungent odor from the methanol. The odor threshold for methanol is 10 ppm.

UEL - 36 percent for methanol LEL - 6 percent for methanol

878°F for methanol

Small Fires: Dry chemical, carbon dioxide, water spray or alcohol resistant foam.

Large Fires: Water spray, fog or alcohol-resistant foam.

Move container away from fire area if you can do so without risk. Dike fire control water for later disposal; do not scatter the material. Apply cooling water to the sides of containers exposed to flames until well after the fire is out.

Flammable/combustible material; may be ignited by heat, spark or flame. Vapors may travel to a source of ignition and flash back. Container may explode in heat of fire. Vapor explosion and poison hazard indoors, outdoors, or in sewers. Runoff to sewer may create fire or explosion hazard.

In a closed container, methyl alcohol is stable at room temperature and it is stable under routine handling and storage. Hazardous polymerization will not occur.

Incompatible with beryllium dihydride; metals; oxidants; potassium tert-butoxide; carbon tetrachloride + metals; dichloromethane. Can react vigorously with oxidizing materials.

Explosive reaction with chloroform + sodium methoxide; diethyl zinc. Violent reaction with alkyl aluminum salts; acetylene bromide; chloroform + sodium hydroxide; CrO₃; cyanuric chloride; (I + ethanol + HgO); Pb(ClO₄)₂; HClO₄; P₂O₃; (KOH + CHCl₂); nitric acid¹

When methanol is heated to decomposition, carbon dioxide and carbon monoxide may be produced, as well as formaldehyde may be produced, and it emits acrid smoke and irritating fumes.

¹Lewis, Richard J., Sr.: *Sax's Dangerous Properties of Industrial Materials, Eighth Edition*. New York, New York: Van Nostrand Reinhold, 1992.

The primary routes of entry are inhalation, ingestion, and absorption.

Irritant to eyes, skin, and upper respiratory system. Headaches, drowsiness, dizziness, vertigo, light-headed, nausea, and vomiting. Visual disturbance, optic nerve damage, and blindness. Skin exposure hazard.

Central nervous system, digestive tract, eyes, and skin.

Eye irritation. Inhalation can result nose irritation, headache, fatigue, nausea, visual impairment or complete and possible blindness, acidosis, convulsions, circulatory collapse, respiratory fatigue, and death. Ingestion can cause gastrointestinal (GI) irritation followed by the symptoms described for inhalation and possible kidney impairment. Skin contact results in a cold sensation, dryness, and cracking, possibly leading to dermatitis. Methyl alcohol may be absorbed through the skin and may cause headache, fatigue, and visual disturbances. Eye contact results in irritation with lacrimation, inflamed lids, and photophobia.

Chronic exposure may result in visual impairment or blindness.

Ocular, respiratory, or dermal disorders may be aggravated by methanol exposure.

Eyes:	Rinse with water 15 to 20 minutes, seek medical assistance.
Skin:	Flush with water for 15 minutes.
Inhalation:	Remove from source to fresh air, provide respiratory support as needed.
Ingestion:	Call Physician, hospital emergency room or Poison Control Center immediately.

- Keep unnecessary people away; isolate hazard area and deny entry.
- Stay upwind; keep out of low areas.
- Shut off ignition sources; no flares, smoking or flames in hazard area.
- Positive pressure self-contained breathing apparatus and chemical protective clothing is recommended for personnel involved in clean-up procedures with no fire.
- Do not walk through spilled material; stop leak if it can be done without risk.
- Water spray may reduce vapor; but it will not prevent ignition in closed spaces.

Dispose of in accordance with federal, state and local regulations.

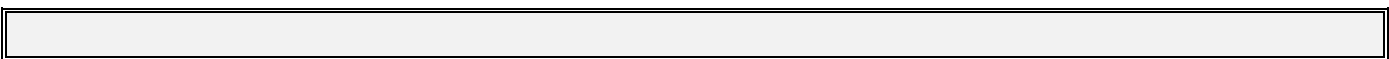
RCRA Hazardous Waste (40 CFR 261.33): Hazardous Waste No. U154
CERCLA Hazardous Substance (40 CFR 302.4): Not Listed
SARA Extremely Hazardous Substance (40 CFR 355): Not Listed
SARA Toxic Chemical (40 CFR 372.65): Not Listed



Under normal use conditions (outdoor windshield cleaning), respiratory protection is not justified.

Splash goggles are recommended when handling the solution. Contact lens use is not recommended.

The selection of protective clothing and gloves is dependent upon anticipated exposure. As reported by the manufacturer, Best Glove style 725R (PVC) offers excellent protection for up to 240 minutes of complete immersion.



The Occupational Safety and Health Administration's Permissible Exposure Limit, which is defined as the maximum concentration of contaminant to which a normal healthy individual may be exposed 8-hours per day, 40-hours per week, without experiencing adverse health effects over a working lifetime.

American Conference of Governmental Industrial Hygienist's Threshold Limit Value, similar to the OSHA PEL but not considered a legal standard.



In inner packaging not over 5 L (1.3 gallons) Consumer commodity, ORM-D
Per 49 CFR 173.150 (b) (3) & 173.150 (c)

Maxim Technologies, Inc.

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SuperClean Brands, Inc.
 51 East Maryland Avenue
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(651) 489-8211

(651) 489-8247

1-800-535-5053

December 12, 2007

Windshield Washer Fluid

Used for cleaning windshields

Windshield Washer Fluid

Hazardous Component*	Approximate Composition	OSHA Permissible Exposure Limit**	NIOSH REL	ACGIH Threshold Limit Value	IDLH (NIOSH)
Methanol (Methyl Alcohol) -CAS 67-56-1 -UN 1230 (DOT Guide 28)	34 percent (by weight)	200 ppm (260 mg/m ³) 8-Hour TWA (Skin)	200 ppm (260 mg/m ³) 8-Hour TWA 250 ppm (310 mg/m ³) Ceiling (Skin)	200 ppm (260 mg/m ³) 8-Hour TWA 250 ppm (310 mg/m ³) Short-term Exposure Limit (15-minute TWA) (Skin)	6,000 ppm (0.6 percent in air)

* The hazardous component listed is not a known or suspected human carcinogen as listed or determined by the National Agency for Research on Cancer, National Toxicological Program "NTP Seventh Annual Report on Carcinogens," or International Agency for Research on Cancer (IARC) monograph reviews. In addition, it is not considered a carcinogen by the Occupational Safety and Health Administration or the National Institute for Occupational Safety and Health.

** This MSDS contains the 1989 PEL's and from the June 1993 Air Contaminants Final Rule, specified in Tables Z-1, Z-2, and Z-3 [Federal Register; 58(124):35338-35351; June 30, 1993].

Approximately 170°F (for product)

90°F

Soluble

100mm @ 21.2° (methanol)

1.11 (methanol)

10.84 cV (methanol)

-25°F

The windshield washer is blue, and it has a mild characteristic pungent odor from the methanol. The odor threshold for methanol is 10 ppm.

UEL - 36 percent for methanol LEL - 6 percent for methanol

878°F for methanol

Small Fires: Dry chemical, carbon dioxide, water spray or alcohol resistant foam.

Large Fires: Water spray, fog or alcohol-resistant foam.

Move container away from fire area if you can do so without risk. Dike fire control water for later disposal; do not scatter the material. Apply cooling water to the sides of containers exposed to flames until well after the fire is out.

Flammable/combustible material; may be ignited by heat, spark or flame. Vapors may travel to a source of ignition and flash back. Container may explode in heat of fire. Vapor explosion and poison hazard indoors, outdoors, or in sewers. Runoff to sewer may create fire or explosion hazard.

In a closed container, methyl alcohol is stable at room temperature and it is stable under routine handling and storage. Hazardous polymerization will not occur.

Incompatible with beryllium dihydride; metals; oxidants; potassium tert-butoxide; carbon tetrachloride + metals; dichloromethane. Can react vigorously with oxidizing materials.

Explosive reaction with chloroform + sodium methoxide; diethyl zinc. Violent reaction with alkyl aluminum salts; acetylene bromide; chloroform + sodium hydroxide; CrO₃; cyanuric chloride; (I + ethanol + HgO); Pb(ClO₄)₂; HClO₄; P₂O₃; (KOH + CHCl₂); nitric acid¹

When methanol is heated to decomposition, carbon dioxide and carbon monoxide may be produced, as well as formaldehyde may be produced, and it emits acrid smoke and irritating fumes.

¹Lewis, Richard J., Sr.: *Sax's Dangerous Properties of Industrial Materials, Eighth Edition*. New York, New York: Van Nostrand Reinhold, 1992.

The primary routes of entry are inhalation, ingestion, and .

Irritant to eyes, skin, and upper respiratory system. Headaches, drowsiness, dizziness, vertigo, light-headed, nausea, and vomiting. Visual disturbance, optic nerve damage, and blindness. Skin exposure hazard.

Central nervous system, digestive tract, eyes, and skin.

Eye irritation. Inhalation can result nose irritation, headache, fatigue, nausea, visual impairment or complete and possible blindness, acidosis, convulsions, circulatory collapse, respiratory fatigue, and death. Ingestion can cause gastrointestinal (GI) irritation followed by the symptoms described for inhalation and possible kidney impairment. Skin contact results in a cold sensation, dryness, and cracking, possibly leading to dermatitis. Methyl alcohol may be absorbed through the skin and may cause headache, fatigue, and visual disturbances. Eye contact results in irritation with lacrimation, inflamed lids, and photophobia.

Chronic exposure may result in visual impairment or blindness.

Ocular, respiratory, or dermal disorders may be aggravated by methanol exposure.

Eyes:	Rinse with water 15 to 20 minutes, seek medical assistance.
Skin:	Flush with water for 15 minutes.
Inhalation:	Remove from source to fresh air, provide respiratory support as needed.
Ingestion:	Call Physician, hospital emergency room or Poison Control Center immediately.

- Keep unnecessary people away; isolate hazard area and deny entry.
- Stay upwind; keep out of low areas.
- Shut off ignition sources; no flares, smoking or flames in hazard area.
- Positive pressure self-contained breathing apparatus and chemical protective clothing is recommended for personnel involved in clean-up procedures with no fire.
- Do not walk through spilled material; stop leak if it can be done without risk.
- Water spray may reduce vapor; but it will not prevent ignition in closed spaces.

Dispose of in accordance with federal, state and local regulations.

RCRA Hazardous Waste (40 CFR 261.33): Hazardous Waste No. U154
CERCLA Hazardous Substance (40 CFR 302.4): Not Listed
SARA Extremely Hazardous Substance (40 CFR 355): Not Listed
SARA Toxic Chemical (40 CFR 372.65): Not Listed



Under normal use conditions (outdoor windshield cleaning), respiratory protection is not justified.

Splash goggles are recommended when handling the solution. Contact lens use is not recommended.

The selection of protective clothing and gloves is dependent upon anticipated exposure. As reported by the manufacturer, Best Glove style 725R (PVC) offers excellent protection for up to 240 minutes of complete immersion.



The Occupational Safety and Health Administration's Permissible Exposure Limit, which is defined as the maximum concentration of contaminant to which a normal healthy individual may be exposed 8-hours per day, 40-hours per week, without experiencing adverse health effects over a working lifetime.

American Conference of Governmental Industrial Hygienist's Threshold Limit Value, similar to the OSHA PEL but not considered a legal standard.



In inner packaging not over 5 L (1.3 gallons) Consumer commodity, ORM-D
Per 49 CFR 173.150 (b) (3) & 173.150 (c)

Maxim Technologies, Inc.

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ZEP 40 (AEROSOL)

Version 2.1

Revision Date 11/16/2015

Print Date 05/10/2016

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : ZEP 40 (AEROSOL)
 Material number : 00000000000014401

Manufacturer or supplier's details

Company : Zep Inc.
 Address : 1310 Seaboard Industrial Blvd., NW
 Atlanta, GA 30318
 Telephone : 404-352-1680

Emergency telephone numbers

For SDS Information	: Compliance Services 1-877-428-9937
For a Medical Emergency	: 877-541-2016 Toll Free - All Calls Recorded
For a Transportation Emergency	: CHEMTREC: 800-424-9300 - All Calls Recorded. In the District of Columbia 202-483-7616

SECTION 2. HAZARDS IDENTIFICATION


Emergency Overview

Appearance	Aerosol containing a liquefied gas
Colour	colourless, clear
Odour	alcohol-like, slight

GHS Classification

Gases under pressure : Liquefied gas
 Eye irritation : Category 2A

GHS Label element

Hazard pictograms : 

Signal word : Warning

Hazard statements : H280 Contains gas under pressure; may explode if heated.
 H319 Causes serious eye irritation.

Precautionary statements : **Prevention:**
 P264 Wash skin thoroughly after handling.
 P280 Wear eye protection/ face protection.
Response:
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P337 + P313 If eye irritation persists: Get medical advice/ attention.
Storage:

ZEP 40 (AEROSOL)

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Revision Date 11/16/2015

Print Date 05/10/2016

P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.
P403 Store in a well-ventilated place.

Potential Health Effects**Carcinogenicity:**

IARC	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
OSHA	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
NTP	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical Name	CAS-No.	Concentration [%]
ethanol	64-17-5	>= 10 - < 20
butane	106-97-8	>= 1 - < 5
propane	74-98-6	>= 1 - < 5

SECTION 4. FIRST AID MEASURES

General advice	: Move out of dangerous area. Show this safety data sheet to the doctor in attendance. Do not leave the victim unattended.
If inhaled	: If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.
In case of skin contact	: Wash off immediately with plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.
In case of eye contact	: Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist. If in eyes, rinse with water for 15 minutes.
If swallowed	: Keep respiratory tract clear. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.

ZEP 40 (AEROSOL)

Version 2.1

Revision Date 11/16/2015

Print Date 05/10/2016

DO NOT induce vomiting unless directed to do so by a physician or poison control center.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Water spray jet
Carbon dioxide (CO₂)
Alcohol-resistant foam
Dry chemical
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : Carbon dioxide (CO₂)
Carbon monoxide
Smoke
- Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Further information : Standard procedure for chemical fires.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
Ensure adequate ventilation.
Refer to protective measures listed in sections 7 and 8.
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
- Environmental precautions : Prevent further leakage or spillage if safe to do so.
- Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Sweep up or vacuum up spillage and collect in suitable container for disposal.

SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Always replace cap after use.

ZEP 40 (AEROSOL)

Version 2.1

Revision Date 11/16/2015

Print Date 05/10/2016

Dispose of rinse water in accordance with local and national regulations.

Avoid exposure - obtain special instructions before use.

Take precautionary measures against static discharges.

Do not breathe vapours or spray mist.

Conditions for safe storage : BEWARE: Aerosol is pressurized. Keep away from direct sun exposure and temperatures over 50 °C. Do not open by force or throw into fire even after use. Do not spray on flames or red-hot objects.
Observe label precautions.
Keep in a dry, cool and well-ventilated place.
Electrical installations / working materials must comply with the technological safety standards.

Materials to avoid : Do not freeze.
Strong oxidizing agents

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
ethanol	64-17-5	TWA	1,000 ppm	ACGIH
		TWA	1,000 ppm 1,900 mg/m ³	NIOSH REL
		TWA	1,000 ppm 1,900 mg/m ³	OSHA Z-1
		TWA	1,000 ppm 1,900 mg/m ³	OSHA P0
butane	106-97-8	TWA	800 ppm 1,900 mg/m ³	NIOSH REL
		TWA	800 ppm 1,900 mg/m ³	OSHA P0
propane	74-98-6	TWA	1,000 ppm	ACGIH
		TWA	1,000 ppm 1,800 mg/m ³	NIOSH REL
		TWA	1,000 ppm 1,800 mg/m ³	OSHA Z-1
		TWA	1,000 ppm 1,800 mg/m ³	OSHA P0

Engineering measures : Handle only in a place equipped with local exhaust (or other appropriate exhaust).

Personal protective equipment

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection

Remarks

: The suitability for a specific workplace should be discussed

ZEP 40 (AEROSOL)

Version 2.1

Revision Date 11/16/2015

Print Date 05/10/2016

with the producers of the protective gloves.

Eye protection	: Tightly fitting safety goggles Wear face-shield and protective suit for abnormal processing problems. Ensure that eyewash stations and safety showers are close to the workstation location.
Skin and body protection	: Impervious clothing Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Hygiene measures	: When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Aerosol containing a liquefied gas
Colour	: colourless, clear
Odour	: alcohol-like, slight
Odour Threshold	: No data available
pH	: not determined
Melting point/freezing point	: Not applicable
Boiling point	: 93 °C
Flash point	: Not applicable
Evaporation rate	: 1
Flammability (solid, gas)	: The product is not flammable.
Upper explosion limit	: Not applicable
Lower explosion limit	: Not applicable
Vapour pressure	: No data available
Relative vapour density	: No data available
Density	: 1.1 g/cm ³
Solubility(ies)	
Water solubility	: soluble
Solubility in other solvents	: not determined
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: not determined
Thermal decomposition	: No data available

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Viscosity
Viscosity, kinematic : Not applicable
Heat of combustion : 7.94 kJ/g

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Stable
Chemical stability : Stable under normal conditions.
Possibility of hazardous reactions : Vapours may form explosive mixture with air.
No decomposition if stored and applied as directed.
Conditions to avoid : Heat, flames and sparks.
Extremes of temperature and direct sunlight.
Incompatible materials : Strong oxidizing agents
Hazardous decomposition products : Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

SECTION 11. TOXICOLOGICAL INFORMATION**Acute toxicity****Product:**

Acute oral toxicity : Acute toxicity estimate : > 5,000 mg/kg
Method: Calculation method

Components:**ethanol:**

Acute oral toxicity : LD50 Oral Rat: 7,060 mg/kg
Acute inhalation toxicity : LC50 Rat: 124.7 mg/l
Exposure time: 4 h

butane:

Acute inhalation toxicity : LC50 Mouse: 1,237 mg/l
Exposure time: 2 h
LC50 Rat: 1,355 mg/l

propane:

Acute inhalation toxicity : LC50 Mouse: 1,237 mg/l
Exposure time: 2 h

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LC50 Rat: 658 mg/l

Exposure time: 4 h

LC50 Rat: 1,355 mg/l

Skin corrosion/irritation

Product:

Remarks: May cause skin irritation in susceptible persons.

Serious eye damage/eye irritation

Product:

Remarks: Severe eye irritation

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

- ethanol:**
- butane:**
- propane:**

STOT - single exposure

No data available

STOT - repeated exposure

No data available

Aspiration toxicity

No data available

Further information

Product:

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

No data available

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Persistence and degradability

No data available

Bioaccumulative potential**Product:**

Partition coefficient: n-octanol/water : Remarks: No data available

Components:**butane :**

Partition coefficient: n-octanol/water : Pow: 2.89

Mobility in soil

No data available

Other adverse effects

No data available

Product:

Regulation 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances

Remarks This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information : No data available

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

Waste from residues : Do not dispose of waste into sewer.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Dispose of in accordance with local regulations.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.
Do not burn, or use a cutting torch on, the empty drum.

SECTION 14. TRANSPORT INFORMATION

Transportation Regulation: 49 CFR (USA):
UN1950, AEROSOLS, NON-FLAMMABLE, 2.2, - Limited quantity

Transportation Regulation: IMDG (Vessel):
UN1950, AEROSOLS, NON-FLAMMABLE, 2.2, - Limited quantity

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Transportation Regulation: IATA (Cargo Air):
UN1950, AEROSOLS, NON-FLAMMABLE, 2.2, - Limited quantity

Transportation Regulation: IATA (Passenger Air):
UN1950, AEROSOLS, NON-FLAMMABLE, 2.2, - Limited quantity

Transportation Regulation: TDG (Canada):
UN1950, AEROSOLS, NON-FLAMMABLE, 2.2, - Limited quantity

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act**CERCLA Reportable Quantity**

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Ammonia, aqueous solution	1336-21-6	1000	*

*: Calculated RQ exceeds reasonably attainable upper limit.

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Acute Health Hazard
Sudden Release of Pressure Hazard

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop 65 This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

The components of this product are reported in the following inventories:

TSCA On TSCA Inventory
DSL This product contains one or several components that are not on the Canadian DSL nor NDSL.
AICS Not in compliance with the inventory
NZIoC Not in compliance with the inventory
PICCS Not in compliance with the inventory
IECSC Not in compliance with the inventory

Inventory Acronym and Validity Area Legend:

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

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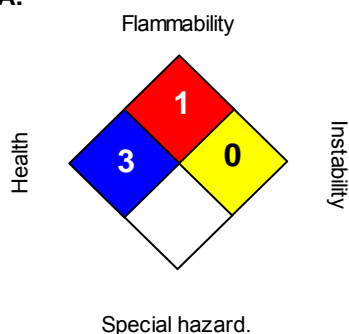
Revision Date 11/16/2015

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SECTION 16. OTHER INFORMATION

Further information

NFPA:



HMIS III:

HEALTH	3
FLAMMABILITY	0
PHYSICAL HAZARD	2

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

OSHA GHS Label Information:

Hazard pictograms



Signal word

: **Warning:**

Hazard statements

: Contains gas under pressure; may explode if heated. Causes serious eye irritation.

Precautionary statements

Prevention: Wash skin thoroughly after handling. Wear eye protection/ face protection.
Response: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/ attention.
Storage: Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F. Store in a well-ventilated place.

Version:	2.1
Revision Date:	11/16/2015
Print Date:	05/10/2016

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. Users should make their own investigations to determine the suitability and applicability of the information for their particular purposes. This SDS has been prepared by the Compliance Services organization supporting this manufacturer, supplier or distributor.

Zep Inc. markets products under well recognized and established brand names such as Zep®, Zep Commercial®, Zep Professional®, Enforcer®, National Chemical™, Selig™, Misty®, Next Dimension™, Petro®, i-Chem®, TimeMist®, TimeWick™, MicrobeMax®, Country Vet®, Konk®, Original Bike Spirits®, Blue Coral®, Black Magic®, Rain-X®, Niagara National™, FC Forward Chemicals®, Rexodan®, Mykal™, and a number of private labeled brands.

SAFETY DATA SHEET



ZEP 40 (AEROSOL)

Version 2.1

Revision Date 11/16/2015

Print Date 05/10/2016

ZEP A-ONE 275GL

Version 1.0

Revision Date 11/15/2014

Print Date 07/06/2016

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : ZEP A-ONE 275GL
 Material number : 000000000000126989

Manufacturer or supplier's details

Company : Zep Inc.
 Address : 1310 Seaboard Industrial Blvd., NW
 Atlanta, GA 30318
 Telephone : 404-352-1680

Emergency telephone numbers

For SDS Information : Compliance Services 1-877-428-9937
For a Medical Emergency : 877-541-2016 Toll Free - All Calls Recorded
For a Transportation Emergency : CHEMTREC: 800-424-9300 - All Calls Recorded.
 In the District of Columbia 202-483-7616

SECTION 2. HAZARDS IDENTIFICATION**Emergency Overview**

Appearance	liquid
Colour	violet
Odour	pleasant

GHS Classification

Skin corrosion : Category 1A
 Serious eye damage : Category 1

GHS Label element

Hazard pictograms :



Signal word : Danger

Hazard statements : H314 Causes severe skin burns and eye damage.

Precautionary statements : **Prevention:**
 P264 Wash skin thoroughly after handling.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
 P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
 P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.

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P304 + P340 + P310 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician.
 P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician.
 P363 Wash contaminated clothing before reuse.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/container in accordance with local regulation.

Potential Health Effects**Carcinogenicity:**

IARC	Group 2B: Possibly carcinogenic to humans trisodium nitrilotriacetate (Solution)	5064-31-3
ACGIH	Confirmed animal carcinogen with unknown relevance to humans 2-butoxyethanol	111-76-2
OSHA	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.	
NTP	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.	

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical Name	CAS-No.	Concentration [%]
tetrasodium ethylenediaminetetraacetate	64-02-8	>= 5 - < 10
2-butoxyethanol	111-76-2	>= 1 - < 5
sodium xylenesulphonate	1300-72-7	>= 1 - < 5
Alcohols, C10-14, ethoxylated	66455-15-0	>= 1 - < 5
disodium metasilicate	6834-92-0	>= 1 - < 5
2-(2-butoxyethoxy)ethanol	112-34-5	>= 1 - < 5
trisodium nitrilotriacetate (Solution)	5064-31-3	>= 0.1 - < 1

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.
 Consult a physician.
 Show this safety data sheet to the doctor in attendance.
 Do not leave the victim unattended.

If inhaled : If unconscious place in recovery position and seek medical

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- advice.
If symptoms persist, call a physician.
- In case of skin contact : Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.
If on skin, rinse well with water.
If on clothes, remove clothes.
- In case of eye contact : Small amounts splashed into eyes can cause irreversible tissue damage and blindness.
In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Continue rinsing eyes during transport to hospital.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
- If swallowed : Clean mouth with water and drink afterwards plenty of water.
Keep respiratory tract clear.
Do NOT induce vomiting.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
Take victim immediately to hospital.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : Carbon dioxide (CO₂)
Carbon monoxide
Nitrogen oxides (NO_x)
Smoke
Sulphur oxides
- Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
- Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

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SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
- Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Do not breathe vapours/dust.
Avoid exposure - obtain special instructions before use.
Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
To avoid spills during handling keep bottle on a metal tray.
Dispose of rinse water in accordance with local and national regulations.
- Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.
Observe label precautions.
Electrical installations / working materials must comply with the technological safety standards.
- Materials to avoid : Oxidizing agents
Do not store near acids.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
2-butoxyethanol	111-76-2	TWA	20 ppm	ACGIH
		TWA	5 ppm 24 mg/m ³	NIOSH REL
		TWA	50 ppm 240 mg/m ³	OSHA Z-1
		TWA	25 ppm 120 mg/m ³	OSHA P0

Biological occupational exposure limits

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Component	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
2-BUTOXYETHANOL	111-76-2	Butoxyacetic acid (BAA)	Urine	End of shift (As soon as possible after exposure ceases)	200 mg/g	ACGIH BEI
Remarks: Creatinine						

Personal protective equipment

- Respiratory protection : In the case of vapour formation use a respirator with an approved filter.
- Hand protection
Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.
- Eye protection : Eye wash bottle with pure water
Tightly fitting safety goggles
Wear face-shield and protective suit for abnormal processing problems.
- Skin and body protection : impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.
- Hygiene measures : When using do not eat or drink.
When using do not smoke.
Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : liquid
- Colour : violet
- Odour : pleasant
- Odour Threshold : no data available
- pH : 12.5 - 13.0
- Melting point/freezing point : no data available
- Boiling point : 104.44 °C
- Flash point :
does not flash
- Evaporation rate : 1
- Upper explosion limit : no data available
- Lower explosion limit : no data available

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Vapour pressure	: no data available
Relative vapour density	: no data available
Density	: 1.081 g/cm ³
Solubility(ies)	
Water solubility	: soluble
Partition coefficient: n-octanol/water	: no data available
Auto-ignition temperature	: not determined
Thermal decomposition	: no data available
Viscosity	
Viscosity, kinematic	: 5 mm ² /s (20 °C)

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Stable
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No decomposition if stored and applied as directed.
Conditions to avoid	: no data available
Incompatible materials	: Oxidizing agents Acids
Hazardous decomposition products	: Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

SECTION 11. TOXICOLOGICAL INFORMATION**Acute toxicity****Product:**

Acute oral toxicity	: Acute toxicity estimate : 4,031 mg/kg Method: Calculation method
Acute inhalation toxicity	: Acute toxicity estimate : > 40 mg/l Exposure time: 4 h Test atmosphere: vapour Method: Calculation method
Acute dermal toxicity	: Acute toxicity estimate : > 5,000 mg/kg Method: Calculation method

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Components:**disodium metasilicate:**

Acute oral toxicity : LD50 rat: 1,153 mg/kg

Skin corrosion/irritation**Product:**

Remarks: Extremely corrosive and destructive to tissue.

Serious eye damage/eye irritation**Product:**

Remarks: May cause irreversible eye damage.

Respiratory or skin sensitisation

no data available

Germ cell mutagenicity

no data available

Carcinogenicity**Product:**

Carcinogenicity - Assessment : Not classifiable as a human carcinogen.

Reproductive toxicity

no data available

tetrasodium ethylenediaminetetraacetate:**2-butoxyethanol:****sodium xylenesulphonate:****Alcohols, C10-14, ethoxylated:****disodium metasilicate:****2-(2-butoxyethoxy)ethanol:****trisodium nitrilotriacetate (Solution):****STOT - single exposure**

no data available

STOT - repeated exposure

no data available

Aspiration toxicity

no data available

Further information**Product:**

Remarks: no data available

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SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity**

no data available

Persistence and degradability

no data available

Bioaccumulative potential**Product:**Partition coefficient: n-
octanol/water : Remarks: no data available**Components:****2-(2-butoxyethoxy)ethanol :**
Partition coefficient: n-
octanol/water : Pow: 1**Mobility in soil**

no data available

Other adverse effects

no data available

Product:Regulation 40 CFR Protection of Environment; Part 82 Protection of
Stratospheric Ozone - CAA Section 602 Class I
SubstancesRemarks This product neither contains, nor was manufactured
with a Class I or Class II ODS as defined by the U.S.
Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A
+ B).Additional ecological
information : no data available**SECTION 13. DISPOSAL CONSIDERATIONS****Disposal methods**Waste from residues : Do not dispose of waste into sewer.
Do not contaminate ponds, waterways or ditches with
chemical or used container.
Dispose of in accordance with local regulations.Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.

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SECTION 14. TRANSPORT INFORMATION
International regulation
UNRTDG

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations
49 CFR

Not regulated as a dangerous good

Special precautions for user

not applicable

SECTION 15. REGULATORY INFORMATION
EPCRA - Emergency Planning and Community Right-to-Know Act
CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
ethane-1,2-diol	107-21-1	5000	*

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Acute Health Hazard

SARA 302 : SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop 65 This product does not contain any chemicals known to State of

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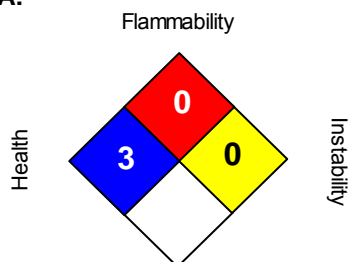
California to cause cancer, birth defects, or any other reproductive harm.

The components of this product are reported in the following inventories:

TSCA	On TSCA Inventory
DSL	This product contains one or several components that are not on the Canadian DSL nor NDSL.
AICS	Not in compliance with the inventory
NZIoC	Not in compliance with the inventory
PICCS	Not in compliance with the inventory
IECSC	Not in compliance with the inventory

Inventory Acronym and Validity Area Legend:

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

SECTION 16. OTHER INFORMATION
Further information
NFPA:

HMIS III:

HEALTH	3
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

OSHA GHS Label Information:

Hazard pictograms



Signal word

Hazard statements

Precautionary statements

: **Danger:**

: Causes severe skin burns and eye damage.

:

Prevention: Wash skin thoroughly after handling. Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/showers. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. Wash contaminated clothing before reuse.

Storage: Store locked up.

Disposal: Dispose of contents/container in accordance with local regulation.

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Version 1.0

Revision Date 11/15/2014

Print Date 07/06/2016

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. Users should make their own investigations to determine the suitability and applicability of the information for their particular purposes. This SDS has been prepared by the Compliance Services organization supporting this manufacturer, supplier or distributor.

Zep Inc. markets products under well recognized and established brand names such as Zep®, Zep Commercial®, Zep Professional®, Enforcer®, National Chemical™, Selig™, Misty®, Next Dimension™, Petro®, i-Chem®, TimeMist®, TimeWick™, MicrobeMax®, Country Vet®, Konk®, Original Bike Spirits®, Blue Coral®, Black Magic®, Rain-X®, Niagara National™, FC Forward Chemicals®, Rexodan®, Mykal™, and a number of private labeled brands.

A00315 MST HEAVY DUTY ADHESIVE 20net12

Version 3.3

Revision Date 02/08/2017

Print Date 03/03/2017

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : A00315 MST HEAVY DUTY ADHESIVE 20net12

Material number : 00000000001002035

Manufacturer or supplier's details

Company : Zep Inc.

Address : 1310 Seaboard Industrial Blvd., NW
Atlanta, GA 30318

Telephone : 404-352-1680

Emergency telephone numbers
For SDS Information : Compliance Services 1-877-428-9937

For a Medical Emergency : 877-541-2016 Toll Free - All Calls Recorded

For a Transportation Emergency : CHEMTREC: 800-424-9300 - All Calls Recorded.
In the District of Columbia 202-483-7616

Recommended use of the chemical and restrictions on use

Recommended use : Adhesive

SECTION 2. HAZARDS IDENTIFICATION
Emergency Overview

Appearance	Aerosol containing a liquefied gas
Colour	light yellow
Odour	solvent-like

GHS Classification

Flammable aerosols : Category 1
 Gases under pressure : Liquefied gas
 Skin irritation : Category 2
 Eye irritation : Category 2A
 Specific target organ toxicity - single exposure : Category 3 (Central nervous system)

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H222 Extremely flammable aerosol.
 H280 Contains gas under pressure; may explode if heated.
 H315 Causes skin irritation.
 H319 Causes serious eye irritation.
 H336 May cause drowsiness or dizziness.

A00315 MST HEAVY DUTY ADHESIVE 20net12

Version 3.3

Revision Date 02/08/2017

Print Date 03/03/2017

Precautionary statements : **Prevention:**
 P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
 P211 Do not spray on an open flame or other ignition source.
 P251 Pressurized container: Do not pierce or burn, even after use.
 P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
 P264 Wash skin thoroughly after handling.
 P271 Use only outdoors or in a well-ventilated area.
 P280 Wear protective gloves/ eye protection/ face protection.

Response:
 P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
 P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P332 + P313 If skin irritation occurs: Get medical advice/ attention.
 P337 + P313 If eye irritation persists: Get medical advice/ attention.
 P362 Take off contaminated clothing and wash before reuse.

Storage:
 P403 Store in a well-ventilated place.
 P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.

Disposal:
 Dispose of contents/container in accordance with local regulation.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical name	CAS-No.	Concentration [%]
propane	74-98-6	>= 20 - < 30
acetone	67-64-1	>= 20 - < 30
butane	106-97-8	>= 10 - < 20
Naphtha (petroleum), hydrotreated light	64742-49-0	>= 10 - < 20
methyl acetate	79-20-9	>= 5 - < 10

The exact percentages of disclosed substances are withheld as trade secrets.

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.
 Show this safety data sheet to the doctor in attendance.
 Do not leave the victim unattended.

If inhaled : If unconscious place in recovery position and seek medical advice.
 If symptoms persist, call a physician.

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Print Date 03/03/2017

- In case of skin contact : Take off contaminated clothing and shoes immediately.
Get medical attention if irritation develops and persists.
Wash contaminated clothing before re-use.
Wash off immediately with plenty of water for at least 15 minutes.
- In case of eye contact : Flush eyes with water as a precaution.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
- If swallowed : Keep respiratory tract clear.
DO NOT induce vomiting unless directed to do so by a physician or poison control center.
- Most important symptoms and effects, both acute and delayed : Effects are immediate and delayed.
Symptoms may include irritation, redness, pain, and rash.
Causes skin irritation.
Causes serious eye irritation.
Review section 2 of SDS to see all potential hazards.
- Notes to physician : Treat symptomatically. Symptoms may be delayed.
-

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Dry chemical
Water spray jet
Alcohol-resistant foam
Carbon dioxide (CO₂)
- Unsuitable extinguishing media : High volume water jet
- Hazardous combustion products : Carbon dioxide (CO₂)
Carbon monoxide
Smoke
- Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
For safety reasons in case of fire, cans should be stored separately in closed containments.
Use a water spray to cool fully closed containers.
- Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.
-

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, : Use personal protective equipment.
-

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protective equipment and emergency procedures	<p>Ensure adequate ventilation. Refer to protective measures listed in sections 7 and 8. Remove all sources of ignition. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.</p>
Environmental precautions	<p>: Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.</p>
Methods and materials for containment and cleaning up	<p>: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Sweep up or vacuum up spillage and collect in suitable container for disposal.</p>

SECTION 7. HANDLING AND STORAGE

Advice on safe handling	<p>: For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Always replace cap after use. Do not breathe vapours or spray mist. Take precautionary measures against static discharges. Provide sufficient air exchange and/or exhaust in work rooms.</p>
Conditions for safe storage	<p>: BEWARE: Aerosol is pressurized. Keep away from direct sun exposure and temperatures over 50 °C. Do not open by force or throw into fire even after use. Do not spray on flames or red-hot objects. No smoking. Observe label precautions. Keep in a dry, cool and well-ventilated place. Electrical installations / working materials must comply with the technological safety standards.</p>
Materials to avoid	<p>: Strong oxidizing agents</p>

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
propane	74-98-6	TWA	1,000 ppm	ACGIH
		TWA	1,000 ppm 1,800 mg/m ³	NIOSH REL
		TWA	1,000 ppm 1,800 mg/m ³	OSHA Z-1
		TWA	1,000 ppm 1,800 mg/m ³	OSHA P0
		PEL	1,000 ppm	CAL PEL

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			1,800 mg/m ³	
acetone	67-64-1	TWA	250 ppm	ACGIH
		STEL	500 ppm	ACGIH
		TWA	250 ppm 590 mg/m ³	NIOSH REL
		TWA	1,000 ppm 2,400 mg/m ³	OSHA Z-1
		TWA	750 ppm 1,800 mg/m ³	OSHA P0
		STEL	1,000 ppm 2,400 mg/m ³	OSHA P0
		STEL	750 ppm 1,780 mg/m ³	CAL PEL
		C	3,000 ppm	CAL PEL
		PEL	500 ppm 1,200 mg/m ³	CAL PEL
butane	106-97-8	TWA	800 ppm 1,900 mg/m ³	NIOSH REL
		TWA	800 ppm 1,900 mg/m ³	OSHA P0
		PEL	800 ppm 1,900 mg/m ³	CAL PEL
methyl acetate	79-20-9	TWA	200 ppm	ACGIH
		STEL	250 ppm	ACGIH
		TWA	200 ppm 610 mg/m ³	NIOSH REL
		ST	250 ppm 760 mg/m ³	NIOSH REL
		TWA	200 ppm 610 mg/m ³	OSHA Z-1
		TWA	200 ppm 610 mg/m ³	OSHA P0
		STEL	250 ppm 760 mg/m ³	OSHA P0
		PEL	200 ppm 610 mg/m ³	CAL PEL
		STEL	250 ppm 760 mg/m ³	CAL PEL

Hazardous components without workplace control parameters

Biological occupational exposure limits

Component	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
2-PROPANONE	67-64-1	Acetone	Urine	End of shift (As soon as possible after exposure ceases)	25 mg/l	ACGIH BEI

Engineering measures : effective ventilation in all processing areas**Personal protective equipment**

Respiratory protection : Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates

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that exposures are within recommended exposure guidelines.

Hand protection	
Remarks	: Skin should be washed after contact. For prolonged or repeated contact use protective gloves. The suitability for a specific workplace should be discussed with the producers of the protective gloves.
Eye protection	: Safety glasses Ensure that eyewash stations and safety showers are close to the workstation location.
Skin and body protection	: Impervious clothing Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Hygiene measures	: General industrial hygiene practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Aerosol containing a liquefied gas
Colour	: light yellow
Odour	: solvent-like
Odour Threshold	: No data available
pH	: No data available
Melting point/freezing point	: No data available
Boiling point	: Not applicable
Flash point	: Not applicable
Evaporation rate	: No data available
Flammability (solid, gas)	: Extremely flammable aerosol.
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: No data available
Density	: No data available
Solubility(ies)	
Water solubility	: partly soluble
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: not determined
Thermal decomposition	: No data available
Heat of combustion	: 40.94 kJ/g

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SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Stable
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Vapours may form explosive mixture with air. No decomposition if stored and applied as directed.
Conditions to avoid	: Heat, flames and sparks. Extremes of temperature and direct sunlight.
Incompatible materials	: Strong oxidizing agents
Hazardous decomposition products	: Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke). Nitrogen oxides (NOx)

SECTION 11. TOXICOLOGICAL INFORMATION**Potential Health Effects**

Aggravated Medical Condition	: None known.
Symptoms of Overexposure	: Effects are immediate and delayed. Symptoms may include irritation, redness, pain, and rash.

Carcinogenicity:

IARC	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
OSHA	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
NTP	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Acute toxicity**Components:**

propane:	
Acute inhalation toxicity	: LC50 Mouse: 1,237 mg/l Exposure time: 2 h
	LC50 Rat: 658 mg/l

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Exposure time: 4 h

LC50 Rat: 1,355 mg/l

acetone:

Acute oral toxicity : LD50 Rat: 5,800 mg/kg

Acute inhalation toxicity : LC50 Rat: 132 mg/l
Exposure time: 3 h

LC50 Rat: 50.1 mg/l

Acute dermal toxicity : LD50 Guinea pig: > 7,426 mg/kg

LD50 Rabbit: > 7,426 mg/kg

butane:

Acute inhalation toxicity : LC50 Mouse: 1,237 mg/l
Exposure time: 2 h

LC50 Rat: 1,355 mg/l

Skin corrosion/irritation

Product:

Remarks: Irritating to skin.

Serious eye damage/eye irritation

Product:

Remarks: Irritating to eyes.

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

propane:

acetone:

butane:

Naphtha (petroleum), hydrotreated light:

methyl acetate:

STOT - single exposure

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No data available

STOT - repeated exposure

No data available

Aspiration toxicity

No data available

Further information**Product:**

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity**

No data available

Persistence and degradability

No data available

Bioaccumulative potential**Product:**

Partition coefficient: n-octanol/water : Remarks: No data available

Components:**butane :**

Partition coefficient: n-octanol/water : Pow: 2.89

Mobility in soil

No data available

Other adverse effects

No data available

Product:

Regulation

40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances

Remarks

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information

: No data available

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SECTION 13. DISPOSAL CONSIDERATIONS
Disposal methods

- Waste from residues : Dispose of in accordance with local regulations.
Do not contaminate ponds, waterways or ditches with chemical or used container.
The product should not be allowed to enter drains, water courses or the soil.
- Contaminated packaging : Do not burn, or use a cutting torch on, the empty drum.
Dispose of as unused product.
Empty remaining contents.
Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

Transportation Regulation: 49 CFR (USA):
ORM-D, CONSUMER COMMODITY

Transportation Regulation: IMDG (Vessel):
UN1950, AEROSOLS, 2.1, - Limited quantity

Transportation Regulation: IATA (Cargo Air):
UN1950, Aerosols, flammable, 2.1, - Limited quantity

Transportation Regulation: IATA (Passenger Air):
UN1950, Aerosols, flammable, 2.1, - Limited quantity

Transportation Regulation: TDG (Canada):
UN1950, AEROSOLS, 2.1, - Limited quantity

The product as delivered to the customer conforms to packaging requirements for shipment by road under US Department of Transportation (DOT) regulations. Additional transportation classifications noted above are for reference only, and not a certification or warranty of the suitability of the packaging for shipment under these alternative transport regulations.

SECTION 15. REGULATORY INFORMATION

- TSCA list** : No substances are subject to a Significant New Use Rule.
No substances are subject to TSCA 12(b) export notification requirements.

EPCRA - Emergency Planning and Community Right-to-Know Act
CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)

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acetone	67-64-1	5000	*
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*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Fire Hazard
Sudden Release of Pressure Hazard
Acute Health Hazard

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop 65 WARNING! This product contains a chemical known to the State of California to cause cancer.

benzene	71-43-2
---------	---------

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

toluene	108-88-3
benzene	71-43-2

The components of this product are reported in the following inventories:

TSCA On TSCA Inventory
DSL All components of this product are on the Canadian DSL

For information on the country notification status for other regions please contact the manufacturer's regulatory group.

Inventory Acronym and Validity Area Legend:

TSCA (USA), DSL (Canada), NDSL (Canada)

SECTION 16. OTHER INFORMATION

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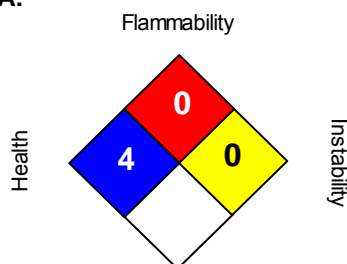
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Further information

NFPA:



HMIS III:

HEALTH	3
FLAMMABILITY	0
PHYSICAL HAZARD	2

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

OSHA - GHS Label Information:

Hazard pictograms



Signal word

: **Danger:**

Hazard statements

: Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness.

Precautionary statements

:

Prevention: Keep away from heat/sparks/open flames/hot surfaces. No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. Wash skin thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/ eye protection/ face protection.

Response: IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation occurs: Get medical advice/ attention. If eye irritation persists: Get medical advice/ attention. Take off contaminated clothing and wash before reuse.

Storage: Store in a well-ventilated place. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.

Disposal: Dispose of contents/container in accordance with local regulation.

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Zep Inc. markets products under well recognized and established brand names such as Zep®, Zep Commercial®, Zep Professional®, Enforcer®, National Chemical™, Selig™, Misty®, Next

SAFETY DATA SHEET



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Dimension™, Petro®, i-Chem®, TimeMist®, TimeWick™, MicrobeMax®, Country Vet®, Konk®, Original Bike Spirits®, Blue Coral®, Black Magic®, Rain-X®, Niagara National™, FC Forward Chemicals®, Rexodan®, Mykal™, and a number of private labeled brands.

ZEP BIG ORANGE_5GL

Version 3.0

Revision Date 01/22/2018

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SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : ZEP BIG ORANGE_5GL

Material number : 000000000000041535

Manufacturer or supplier's details

Company : Zep Inc.

Address : 350 Joe Frank Harris Parkway, SE
Emerson, GA 30137

Telephone : 404-352-1680

Emergency telephone numbers**For SDS Information** : Compliance Services 1-877-428-9937**For a Medical Emergency** : 877-541-2016 Toll Free - All Calls Recorded**For a Transportation
Emergency** : CHEMTREC: 800-424-9300 - All Calls Recorded.
In the District of Columbia 202-483-7616**Recommended use of the chemical and restrictions on use**

Recommended use : Degreaser

SECTION 2. HAZARDS IDENTIFICATION**Emergency Overview**

Appearance	liquid
Colour	clear, orange
Odour	strong

GHS ClassificationFlammable liquids : Category 3
Skin irritation : Category 2
Eye irritation : Category 2A
Skin sensitisation : Category 1
Aspiration hazard : Category 1**GHS label elements**

Hazard pictograms :



Signal word : Danger

Hazard statements : H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.

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Precautionary statements : **Prevention:**
 P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
 P233 Keep container tightly closed.
 P240 Ground/bond container and receiving equipment.
 P241 Use explosion-proof electrical/ ventilating/ lighting equipment.
 P242 Use only non-sparking tools.
 P243 Take precautionary measures against static discharge.
 P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
 P264 Wash skin thoroughly after handling.
 P272 Contaminated work clothing should not be allowed out of the workplace.
 P280 Wear protective gloves/ eye protection/ face protection.

Response:
 P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
 P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P331 Do NOT induce vomiting.
 P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
 P337 + P313 If eye irritation persists: Get medical advice/ attention.
 P362 Take off contaminated clothing and wash before reuse.
 P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Storage:
 P403 + P235 Store in a well-ventilated place. Keep cool.

Disposal:
 P501 Dispose of contents/container in accordance with local regulation.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical name	CAS-No.	Concentration [%]
d-limonene	5989-27-5	>= 70 - < 90
4-Nonylphenol branched, ethoxylated	127087-87-0	>= 5 - < 10
p-mentha-1,4-diene	99-85-4	>= 1 - < 5
linalool	78-70-6	>= 1 - < 5
7-methyl-3-methyleneocta-1,6-diene	123-35-3	>= 1 - < 5

The exact percentages of disclosed substances are withheld as trade secrets.

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.

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Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.

- If inhaled : If unconscious, place in recovery position and seek medical advice.
If symptoms persist, call a physician.
- In case of skin contact : In case of contact, immediately flush skin with soap and plenty of water.
If skin irritation persists, call a physician.
- In case of eye contact : Flush eyes with water at least 15 minutes. Get medical attention if eye irritation develops or persists.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
- If swallowed : Clean mouth with water and drink afterwards plenty of water.
Keep respiratory tract clear.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
DO NOT induce vomiting unless directed to do so by a physician or poison control center.
- Most important symptoms and effects, both acute and delayed : Effects are immediate and delayed.
Symptoms may include irritation, redness, pain, and rash.
Causes skin irritation.
Causes serious eye irritation.
Review section 2 of SDS to see all potential hazards.
- Notes to physician : Treat symptomatically. Symptoms may be delayed.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Alcohol-resistant foam
Carbon dioxide (CO₂)
Dry chemical
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : Carbon dioxide (CO₂)
Carbon monoxide
Smoke
- Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must

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be disposed of in accordance with local regulations.
For safety reasons in case of fire, cans should be stored separately in closed containments.
Use a water spray to cool fully closed containers.

Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
Remove all sources of ignition.
Evacuate personnel to safe areas.
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
- Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods and materials for containment and cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Avoid exposure - obtain special instructions before use.
Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Take precautionary measures against static discharges.
Provide sufficient air exchange and/or exhaust in work rooms.
Open drum carefully as content may be under pressure.
Dispose of rinse water in accordance with local and national regulations.
Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.
- Conditions for safe storage : No smoking.
Keep container tightly closed in a dry and well-ventilated place.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Observe label precautions.
Electrical installations / working materials must comply with the technological safety standards.
- Materials to avoid : Keep away from oxidizing agents and strongly acid or alkaline materials.

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SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
d-limonene	5989-27-5	TWA	30 ppm	US WEEL

Engineering measures : effective ventilation in all processing areas

Personal protective equipment

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection

Material

: Protective gloves

Remarks

: The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection

: Tightly fitting safety goggles

Wear face-shield and protective suit for abnormal processing problems.

Skin and body protection

: Impervious clothing

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures

: When using do not eat or drink.

When using do not smoke.

Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Colour : clear, orange

Odour : strong

Odour Threshold : No data available

pH : Not applicable

Melting point/freezing point : No data available

Boiling point : 170 °C

Flash point : 53.9 °C

Method: closed cup

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Evaporation rate	: < 1
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: 2.533 hPa
Relative vapour density	: No data available
Density	: 0.864 g/cm ³
Solubility(ies)	
Water solubility	: emulsifiable
Solubility in other solvents	: Not applicable
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: not determined
Thermal decomposition	: No data available
Viscosity	
Viscosity, kinematic	: 3.8 mm ² /s (20 °C)

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Stable
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Vapours may form explosive mixture with air. No decomposition if stored and applied as directed.
Conditions to avoid	: Extremes of temperature and direct sunlight. Heat, flames and sparks.
Incompatible materials	: Acids Oxidizing agents
Hazardous decomposition products	: Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke). Nitrogen oxides (NO _x)

SECTION 11. TOXICOLOGICAL INFORMATION**Potential Health Effects**

Aggravated Medical Condition	: None known.
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Symptoms of Overexposure : Effects are immediate and delayed.
Symptoms may include irritation, redness, pain, and rash.

Carcinogenicity:

IARC No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

OSHA No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Acute toxicity**Product:**

Acute oral toxicity : Acute toxicity estimate : > 5,000 mg/kg
Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate : > 5,000 mg/kg
Method: Calculation method

Components:**d-limonene:**

Acute oral toxicity : LD50 Oral Rat: 4,400 mg/kg

Acute dermal toxicity : LD50 Dermal Rabbit: > 5,000 mg/kg

4-Nonylphenol branched, ethoxylated:

Acute oral toxicity : LD50 Oral Rat: 16,000 mg/kg

Acute dermal toxicity : LD50 Rabbit: 2,573 mg/kg

7-methyl-3-methyleneocta-1,6-diene:

Acute oral toxicity : LD50 Oral Rat: > 5,000 mg/kg

Acute dermal toxicity : LD50 Dermal Rabbit: > 5,000 mg/kg

Skin corrosion/irritation**Product:**

Remarks: Irritating to skin.

Serious eye damage/eye irritation**Product:**

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Remarks: Severe eye irritation

Respiratory or skin sensitisation**Product:**

Remarks: Causes sensitisation.

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

STOT - single exposure

No data available

STOT - repeated exposure

No data available

Aspiration toxicity

No data available

Further information**Product:**

Remarks: Solvents may degrease the skin.

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity**

No data available

Persistence and degradability

No data available

Bioaccumulative potential**Product:**

Partition coefficient: n-octanol/water : Remarks: No data available

Mobility in soil

No data available

Other adverse effects

No data available

ZEP BIG ORANGE_5GL

Version 3.0

Revision Date 01/22/2018

Print Date 08/29/2022

Product:

Regulation	40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances
Remarks	This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).
Additional ecological information	: No data available

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

Waste from residues	: The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of in accordance with local regulations.
Contaminated packaging	: Empty remaining contents. Dispose of as unused product. Do not re-use empty containers. Do not burn, or use a cutting torch on, the empty drum.

SECTION 14. TRANSPORT INFORMATION

Transportation Regulation: 49 CFR (USA):
NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation: IMDG (Vessel):
UN1993, FLAMMABLE LIQUID, N.O.S., (D-LIMONENE), 3, III, MP: (D-LIMONENE)

Transportation Regulation: IATA (Cargo Air):
UN1993, Flammable liquid, n.o.s., (D-LIMONENE), 3, III, MP: (D-LIMONENE)

Transportation Regulation: IATA (Passenger Air):
UN1993, Flammable liquid, n.o.s., (D-LIMONENE), 3, III, MP: (D-LIMONENE)

Transportation Regulation: TDG (Canada):
NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

The product as delivered to the customer conforms to packaging requirements for shipment by road under US Department of Transportation (DOT) regulations. Additional transportation classifications noted above are for reference only, and not a certification or warranty of the suitability of the packaging for shipment under these alternative transport regulations.

ZEP BIG ORANGE_5GL

Version 3.0

Revision Date 01/22/2018

Print Date 08/29/2022

SECTION 15. REGULATORY INFORMATION

TSCA list : No substances are subject to a Significant New Use Rule.
No substances are subject to TSCA 12(b) export notification requirements.

EPCRA - Emergency Planning and Community Right-to-Know Act**CERCLA Reportable Quantity**

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Flammable (gases, aerosols, liquids, or solids)
Skin corrosion or irritation
Serious eye damage or eye irritation
Respiratory or skin sensitisation
Aspiration hazard

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop. 65

WARNING: This product can expose you to chemicals including 7-methyl-3-methyleneocta-1,6-diene, which is/are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

The components of this product are reported in the following inventories:

DSL This product contains one or more components that are listed on the Canadian NDSL. All other components are on the Canadian DSL.
TSCA On TSCA Inventory

For information on the country notification status for other regions please contact the manufacturer's regulatory group.

Inventory Acronym and Validity Area Legend:

TSCA (USA), DSL (Canada), NDSL (Canada)

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Version 3.0

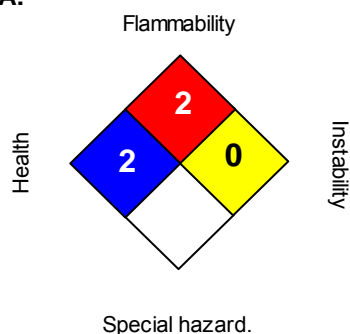
Revision Date 01/22/2018

Print Date 08/29/2022

SECTION 16. OTHER INFORMATION

Further information

NFPA:



HMIS III:

HEALTH	2
FLAMMABILITY	2
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

OSHA - GHS Label Information:

Hazard pictograms



Signal word

Hazard statements

Precautionary statements

- Danger:**
- Flammable liquid and vapour. May be fatal if swallowed and enters airways. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation.
- Prevention:** Keep away from heat/sparks/open flames/hot surfaces. No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing dust/fume/gas/mist/vapours/spray. Wash skin thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/eye protection/face protection.
- Response:** IF SWALLOWED: Immediately call a POISON CENTER/doctor. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Do NOT induce vomiting. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
- Storage:** Store in a well-ventilated place. Keep cool.
- Disposal:** Dispose of contents/container in accordance with local regulation.

Version:	3.0
Revision Date:	01/22/2018
Print Date:	08/29/2022

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. Users should make their own investigations to determine the suitability and applicability of the information for their particular purposes.

ZEP BIG ORANGE_5GL

Version 3.0

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This SDS has been prepared by the Compliance Services organization supporting this manufacturer, supplier or distributor.

Zep Inc. markets products under well recognized and established brand names such as Zep®, Zep Commercial®, Zep Professional®, Enforcer®, National Chemical™, Selig™, Misty®, Next Dimension™, Petro®, i-Chem®, TimeMist®, TimeWick™, MicrobeMax®, Country Vet®, Konk®, Original Bike Spirits®, Blue Coral®, Black Magic®, Rain-X®, Niagara National™, FC Forward Chemicals®, Rexodan®, Mykal™, and a number of private labeled brands.

SAFETY DATA SHEET

ZEP NON-CHLORINATED BRAKE PARTS CLEANER ZAA730 20N14 12CT

Version 5.1

Revision Date 06/22/2020

Print Date 08/31/2022

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : ZEP NON-CHLORINATED BRAKE PARTS CLEANER
ZAA730 20N14 12CT

Material number : 00000000001047992

Manufacturer or supplier's details

Company : Zep Inc.

Address : 350 Joe Frank Harris Parkway, SE
Emerson, GA 30137

Telephone : 404-352-1680

Emergency telephone numbers

For SDS Information : Compliance Services 1-877-428-9937

For a Medical Emergency : 877-541-2016 Toll Free - All Calls Recorded

For a Transportation : CHEMTREC: 800-424-9300 - All Calls Recorded.

Emergency : In the District of Columbia 202-483-7616

Recommended use of the chemical and restrictions on use

Note: This product is labeled as a consumer product in accordance with the United States Consumer Product Safety Commission regulations. The warnings presented below in this Safety Data Sheet (SDS) comply with the 2012 OSHA Hazard Communication Standard (GHS - Globally Harmonized System of Classification and Labeling). The requirements for the labeling and warnings of consumer products may differ from those required for GHS based hazard communication.

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

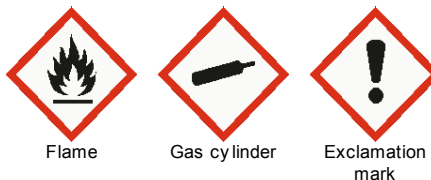
Appearance	Aerosol containing a compressed gas
Colour	clear
Odour	solvent-like

GHS Classification

Flammable aerosols : Category 1
Gases under pressure : Compressed gas
Eye irritation : Category 2A
Specific target organ toxicity - single exposure : Category 3 (Central nervous system)

GHS label elements

Hazard pictograms :



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ZEP NON-CHLORINATED BRAKE PARTS CLEANER ZAA730 20N14 12CT

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Signal word : Danger

Hazard statements : H222 Extremely flammable aerosol.
H280 Contains gas under pressure; may explode if heated.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

Precautionary statements : **Prevention:**
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211 Do not spray on an open flame or other ignition source.
P251 Pressurized container: Do not pierce or burn, even after use.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear eye protection/ face protection.
Response:
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
Storage:
P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.
P403 + P235 Store in a well-ventilated place. Keep cool.
Disposal:
P501 Dispose of contents/container in accordance with local regulation.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical name	CAS-No.	Concentration [%]
acetone	67-64-1	>= 70 - < 90
Naphtha (petroleum), hydrotreated light	64742-49-0	>= 5 - < 10
carbon dioxide	124-38-9	>= 5 - < 10

The exact percentages of disclosed substances are withheld as trade secrets.

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.

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	Do not leave the victim unattended. Get medical attention.
If inhaled	: Consult a physician after significant exposure. If unconscious, place in recovery position and seek medical advice.
In case of skin contact	: If skin irritation persists, call a physician. Wash off immediately with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash contaminated clothing before re-use.
In case of eye contact	: Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
If swallowed	: Keep respiratory tract clear. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. DO NOT induce vomiting unless directed to do so by a physician or poison control center.
Most important symptoms and effects, both acute and delayed	: Effects are dependent on exposure (dose, concentration, contact time). Effects are immediate and delayed. Symptoms may include central nervous system depression, resulting in headache, nausea and/or dizziness. Causes serious eye irritation. May cause drowsiness or dizziness. Review section 2 of SDS to see all potential hazards.
Notes to physician	: Treat symptomatically. Symptoms may be delayed.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	: Alcohol-resistant foam Carbon dioxide (CO ₂) Dry chemical
Unsuitable extinguishing media	: High volume water jet
Specific hazards during firefighting	: Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion products	: Carbon dioxide (CO ₂) Carbon monoxide Smoke
Specific extinguishing	: Use extinguishing measures that are appropriate to local

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methods	circumstances and the surrounding environment.
Further information	: Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons in case of fire, cans should be stored separately in closed containments. Use a water spray to cool fully closed containers.
Special protective equipment for firefighters	: Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	: Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
Environmental precautions	: Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains, inform respective authorities.
Methods and materials for containment and cleaning up	: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Sweep up or vacuum up spillage and collect in suitable container for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling	: Do not breathe vapours or spray mist. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Take precautionary measures against static discharges. Provide sufficient air exchange and/or exhaust in work rooms. Dispose of rinse water in accordance with local and national regulations. Always replace cap after use.
Conditions for safe storage	: BEWARE: Aerosol is pressurized. Keep away from direct sun exposure and temperatures over 50 °C. Do not open by force or throw into fire even after use. Do not spray on flames or red-hot objects. No smoking. Keep in a dry, cool and well-ventilated place. Observe label precautions.

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Electrical installations / working materials must comply with the technological safety standards.

Materials to avoid : Strong oxidizing agents

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
acetone	67-64-1	TWA	250 ppm	ACGIH
		STEL	500 ppm	ACGIH
		TWA	250 ppm 590 mg/m ³	NIOSH REL
		TWA	1,000 ppm 2,400 mg/m ³	OSHA Z-1
		TWA	750 ppm 1,800 mg/m ³	OSHA P0
		STEL	1,000 ppm 2,400 mg/m ³	OSHA P0
		STEL	750 ppm 1,780 mg/m ³	CAL PEL
		C	3,000 ppm	CAL PEL
		PEL	500 ppm 1,200 mg/m ³	CAL PEL
		carbon dioxide	124-38-9	TWA
STEL	30,000 ppm			ACGIH
TWA	5,000 ppm 9,000 mg/m ³			NIOSH REL
ST	30,000 ppm 54,000 mg/m ³			NIOSH REL
TWA	5,000 ppm 9,000 mg/m ³			OSHA Z-1
TWA	10,000 ppm 18,000 mg/m ³			OSHA P0
STEL	30,000 ppm 54,000 mg/m ³			OSHA P0
PEL	5,000 ppm 9,000 mg/m ³			CAL PEL
STEL	30,000 ppm 54,000 mg/m ³			CAL PEL

Biological occupational exposure limits

Component	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
2-PROPANONE	67-64-1	Acetone	Urine	End of shift (As soon as possible after	25 mg/l	ACGIH BEI

SAFETY DATA SHEET

ZEP NON-CHLORINATED BRAKE PARTS CLEANER ZAA730 20N14 12CT

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				exposure ceases)		
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Engineering measures : effective ventilation in all processing areas

Personal protective equipment

Respiratory protection : Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.

Hand protection

Material : Protective gloves

Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection

: Eye wash bottle with pure water
Wear face-shield and protective suit for abnormal processing problems.
Safety glasses

Skin and body protection

: Impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures

: When using do not eat or drink.
When using do not smoke.
Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Aerosol containing a compressed gas

Colour : clear

Odour : solvent-like

Odour Threshold : No data available

pH : Not applicable

Melting point/freezing point : No data available

Boiling point : No data available

Flash point :
No data available

Evaporation rate : No data available

Flammability (solid, gas, liquid) : Extremely flammable aerosol.

Upper explosion limit : No data available

Lower explosion limit : No data available

SAFETY DATA SHEET

ZEP NON-CHLORINATED BRAKE PARTS CLEANER ZAA730 20N14 12CT

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Vapour pressure	: No data available
Relative vapour density	: No data available
Density	: 0.757 g/cm ³
Solubility(ies)	
Water solubility	: No data available
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: not determined
Thermal decomposition	: No data available
Viscosity	
Viscosity, kinematic	: No data available
Heat of combustion	: 29.32 kJ/g

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Stable
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Vapours may form explosive mixture with air.
Conditions to avoid	: Heat, flames and sparks. Extremes of temperature and direct sunlight.
Incompatible materials	: Oxidizing agents
Hazardous decomposition products	: Carbon dioxide (CO ₂) Carbon monoxide

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects

Aggravated Medical Condition	: None known.
Symptoms of Overexposure	: Effects are dependent on exposure (dose, concentration, contact time). Effects are immediate and delayed. Symptoms may include central nervous system depression, resulting in headache, nausea and/or dizziness. Causes serious eye irritation.

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May cause drowsiness or dizziness.
Review section 2 of SDS to see all potential hazards.
Treat symptomatically. Symptoms may be delayed.

Carcinogenicity:

IARC	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
OSHA	No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.
NTP	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Acute toxicity

Components:

acetone:

Acute oral toxicity	: LD50 Rat: 5,800 mg/kg
Acute inhalation toxicity	: LC50 Rat: 132 mg/l Exposure time: 3 h LC50 Rat: 50.1 mg/l
Acute dermal toxicity	: LD50 Guinea pig: > 7,426 mg/kg LD50 Rabbit: > 7,426 mg/kg

Skin corrosion/irritation

Product:

Remarks: May irritate skin.

Serious eye damage/eye irritation

Product:

Remarks: Severe eye irritation

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

SAFETY DATA SHEET

ZEP NON-CHLORINATED BRAKE PARTS CLEANER ZAA730 20N14 12CT

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No data available

Reproductive toxicity

No data available

STOT - single exposure

No data available

STOT - repeated exposure

No data available

Aspiration toxicity

No data available

Further information

Product:

Remarks: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting., Concentrations substantially above the TLV value may cause narcotic effects., Solvents may degrease the skin.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

No data available

Persistence and degradability

No data available

Bioaccumulative potential

Product:

Partition coefficient: n- octanol/water : Remarks: No data available

Mobility in soil

No data available

Other adverse effects

No data available

Product:

Regulation

40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances

Remarks

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A

SAFETY DATA SHEET

ZEP NON-CHLORINATED BRAKE PARTS CLEANER ZAA730 20N14 12CT

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+ B).

Additional ecological information : Not applicable

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : The product should not be allowed to enter drains, water courses or the soil.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Dispose of in accordance with local regulations.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.
Do not burn, or use a cutting torch on, the empty drum.

SECTION 14. TRANSPORT INFORMATION

Transportation Regulation: 49 CFR (USA):
UN1950, AEROSOLS, FLAMMABLE, 2.1, - Limited quantity

Transportation Regulation: IMDG (Vessel):
UN1950, AEROSOLS, FLAMMABLE, 2.1, - Limited quantity

Transportation Regulation: IATA (Cargo Air):
UN1950, AEROSOLS, FLAMMABLE, 2.1, - Limited quantity

Transportation Regulation: IATA (Passenger Air):
UN1950, AEROSOLS, FLAMMABLE, 2.1, - Limited quantity

Transportation Regulation: TDG (Canada):
UN1950, AEROSOLS, FLAMMABLE, 2.1, - Limited quantity

The product as delivered to the customer conforms to packaging requirements for shipment by road under US Department of Transportation (DOT) regulations. Additional transportation classifications noted above are for reference only, and not a certification or warranty of the suitability of the packaging for shipment under these alternative transport regulations.

SECTION 15. REGULATORY INFORMATION

TSCA list : No substances are subject to a Significant New Use Rule.

SAFETY DATA SHEET

ZEP NON-CHLORINATED BRAKE PARTS CLEANER ZAA730 20N14 12CT

Version 5.1

Revision Date 06/22/2020

Print Date 08/31/2022

No substances are subject to TSCA 12(b) export notification requirements.

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
acetone	67-64-1	5000	*

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Flammable (gases, aerosols, liquids, or solids)
Gases under pressure
Serious eye damage or eye irritation
Specific target organ toxicity (single or repeated exposure)

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop. 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

The components of this product are reported in the following inventories:

DSL All components of this product are on the Canadian DSL
TSCA On TSCA Inventory

For information on the country notification status for other regions please contact the manufacturer's regulatory group.

Inventory Acronym and Validity Area Legend:

TSCA (USA), DSL (Canada), NDSL (Canada)

SECTION 16. OTHER INFORMATION

SAFETY DATA SHEET

ZEP NON-CHLORINATED BRAKE PARTS CLEANER ZAA730 20N14 12CT

Version 5.1

Revision Date 06/22/2020

Print Date 08/31/2022

Further information

NFPA:

HEALTH	2
FLAMMABILITY	4
INSTABILITY	0
SPECIAL HAZARD.	

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme

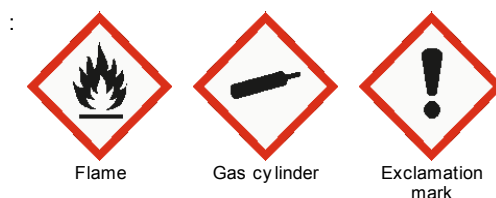
HMIS III:

HEALTH	2
FLAMMABILITY	4
PHYSICAL HAZARD	3

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

OSHA - GHS Label Information:

Hazard pictograms



Signal word

Hazard statements

Precautionary statements

: **Danger:**
: Extremely flammable aerosol. Contains gas under pressure; may explode if heated.
: Causes serious eye irritation. May cause drowsiness or dizziness.

: **Prevention:** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source.
: Pressurized container: Do not pierce or burn, even after use. Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. Wash skin thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear eye protection/ face protection.
: **Response:** IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/ attention.

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ZEP NON-CHLORINATED BRAKE PARTS CLEANER ZAA730 20N14 12CT

Version 5.1

Revision Date 06/22/2020

Print Date 08/31/2022

Storage: Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F. Store in a well-ventilated place. Keep cool.

Disposal: Dispose of contents/container in accordance with local regulation.

Version:	5.1
Revision Date:	06/22/2020
Print Date:	08/31/2022

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. Users should make their own investigations to determine the suitability and applicability of the information for their particular purposes. This SDS has been prepared by the Compliance Services organization supporting this manufacturer, supplier or distributor.

ZEP CARB X - NEW AERO DZ

Version 1.0

Revision Date 01/28/2015

Print Date 06/30/2016

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : ZEP CARB X - NEW AERO DZ

Material number : 000000000000021501

Manufacturer or supplier's details

Company : Zep Inc.

Address : 1310 Seaboard Industrial Blvd., NW
Atlanta, GA 30318

Telephone : 404-352-1680

Emergency telephone numbers

For SDS Information	: Compliance Services 1-877-428-9937
For a Medical Emergency	: 877-541-2016 Toll Free - All Calls Recorded
For a Transportation Emergency	: CHEMTREC: 800-424-9300 - All Calls Recorded. In the District of Columbia 202-483-7616

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	Aerosol containing a compressed gas
Colour	colourless
Odour	strong, solvent-like

GHS Classification

Flammable aerosols : Category 1
 Gases under pressure : Compressed gas
 Acute toxicity (Oral) : Category 4
 Acute toxicity (Inhalation) : Category 4
 Acute toxicity (Dermal) : Category 4
 Skin irritation : Category 2
 Serious eye damage : Category 1
 Carcinogenicity : Category 2
 Reproductive toxicity : Category 2
 Specific target organ toxicity - single exposure : Category 1
 Specific target organ toxicity - single exposure : Category 3 (Central nervous system)
 Specific target organ toxicity - repeated exposure (Inhalation) : Category 2

GHS Label element

Hazard pictograms :



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- Signal word : Danger
- Hazard statements : H222 Extremely flammable aerosol.
H280 Contains gas under pressure; may explode if heated.
H302 + H312 + H332 Harmful if swallowed, in contact with skin or if inhaled
H315 Causes skin irritation.
H318 Causes serious eye damage.
H336 May cause drowsiness or dizziness.
H351 Suspected of causing cancer.
H361 Suspected of damaging fertility or the unborn child.
H370 Causes damage to organs.
H373 May cause damage to organs through prolonged or repeated exposure if inhaled.
- Precautionary statements : **Prevention:**
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211 Do not spray on an open flame or other ignition source.
P251 Pressurized container: Do not pierce or burn, even after use.
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear eye protection/ face protection.
P280 Wear protective gloves/ protective clothing.
P281 Use personal protective equipment as required.
Response:
P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P302 + P352 + P312 IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or doctor/ physician if you feel unwell.
P304 + P340 + P312 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician.
P307 + P311 IF exposed: Call a POISON CENTER or doctor/ physician.
P332 + P313 If skin irritation occurs: Get medical advice/ attention.
P362 Take off contaminated clothing and wash before reuse.
Storage:
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.
Disposal:
P501 Dispose of contents/container in accordance with local

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regulation.

Potential Health Effects
Carcinogenicity:

IARC	Group 2B: Possibly carcinogenic to humans	
	ethylbenzene	100-41-4
ACGIH	Confirmed animal carcinogen with unknown relevance to humans	
	ethylbenzene	100-41-4
OSHA	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.	
NTP	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.	

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS
Hazardous components

Chemical Name	CAS-No.	Concentration [%]
acetone	67-64-1	>= 30 - < 50
toluene	108-88-3	>= 20 - < 30
methanol	67-56-1	>= 10 - < 20
xylenes	1330-20-7	>= 5 - < 10
carbon dioxide	124-38-9	>= 5 - < 10
ethylbenzene	100-41-4	>= 1 - < 5

SECTION 4. FIRST AID MEASURES

General advice	: Consult a physician. Show this safety data sheet to the doctor in attendance. Do not leave the victim unattended.
If inhaled	: Consult a physician after significant exposure. If unconscious place in recovery position and seek medical advice.
In case of skin contact	: If skin irritation persists, call a physician. Wash off immediately with plenty of water for at least 15 minutes. If on clothes, remove clothes.
In case of eye contact	: Remove contact lenses. Protect unharmed eye. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Keep eye wide open while rinsing.
If swallowed	: Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.

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DO NOT induce vomiting unless directed to do so by a physician or poison control center.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Alcohol-resistant foam
Carbon dioxide (CO₂)
Dry chemical
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : Carbon dioxide (CO₂)
Carbon monoxide
Smoke
- Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
For safety reasons in case of fire, cans should be stored separately in closed containments.
Use a water spray to cool fully closed containers.
- Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
Ensure adequate ventilation.
Remove all sources of ignition.
Evacuate personnel to safe areas.
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
- Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Sweep up or vacuum up spillage and collect in suitable container for disposal.

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SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Do not breathe vapours/dust.
 Avoid contact with skin and eyes.
 For personal protection see section 8.
 Smoking, eating and drinking should be prohibited in the application area.
 Provide sufficient air exchange and/or exhaust in work rooms.
 Open drum carefully as content may be under pressure.
- Conditions for safe storage : BEWARE: Aerosol is pressurized. Keep away from direct sun exposure and temperatures over 50 °C. Do not open by force or throw into fire even after use. Do not spray on flames or red-hot objects.
 No smoking.
 Keep container tightly closed in a dry and well-ventilated place.
 Containers which are opened must be carefully resealed and kept upright to prevent leakage.
 Observe label precautions.
 Electrical installations / working materials must comply with the technological safety standards.
- Materials to avoid : Oxidizing agents
 Do not freeze.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
acetone	67-64-1	TWA	500 ppm	ACGIH
		STEL	750 ppm	ACGIH
		TWA	250 ppm 590 mg/m ³	NIOSH REL
		TWA	1,000 ppm 2,400 mg/m ³	OSHA Z-1
		TWA	750 ppm 1,800 mg/m ³	OSHA P0
		STEL	1,000 ppm 2,400 mg/m ³	OSHA P0
toluene	108-88-3	TWA	20 ppm	ACGIH
		TWA	100 ppm 375 mg/m ³	NIOSH REL
		ST	150 ppm 560 mg/m ³	NIOSH REL
		TWA	200 ppm	OSHA Z-2
		CEIL	300 ppm	OSHA Z-2
		Peak	500 ppm	OSHA Z-2
		TWA	100 ppm 375 mg/m ³	OSHA P0
		STEL	150 ppm	OSHA P0

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			560 mg/m ³	
methanol	67-56-1	TWA	200 ppm	ACGIH
		STEL	250 ppm	ACGIH
		TWA	200 ppm 260 mg/m ³	NIOSH REL
		ST	250 ppm 325 mg/m ³	NIOSH REL
		TWA	200 ppm 260 mg/m ³	OSHA Z-1
		STEL	250 ppm 325 mg/m ³	OSHA P0
		TWA	200 ppm 260 mg/m ³	OSHA P0
xylenes	1330-20-7	TWA	100 ppm	ACGIH
		STEL	150 ppm	ACGIH
carbon dioxide	124-38-9	TWA	5,000 ppm	ACGIH
		STEL	30,000 ppm	ACGIH
		TWA	5,000 ppm 9,000 mg/m ³	NIOSH REL
		ST	30,000 ppm 54,000 mg/m ³	NIOSH REL
		TWA	5,000 ppm 9,000 mg/m ³	OSHA Z-1
		TWA	10,000 ppm 18,000 mg/m ³	OSHA P0
		STEL	30,000 ppm 54,000 mg/m ³	OSHA P0
ethylbenzene	100-41-4	TWA	100 ppm	ACGIH
		STEL	125 ppm	ACGIH
		TWA	100 ppm 435 mg/m ³	NIOSH REL
		ST	125 ppm 545 mg/m ³	NIOSH REL
		TWA	100 ppm 435 mg/m ³	OSHA Z-1
		TWA	100 ppm 435 mg/m ³	OSHA P0
		STEL	125 ppm 545 mg/m ³	OSHA P0

Biological occupational exposure limits

Component	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
2-PROPANONE	67-64-1	Acetone	Urine	End of shift (As soon as possible after exposure ceases)	50 mg/l	ACGIH BEI
METHYLBENZENE	108-88-3	Toluene	In blood	Prior to last shift of workweek	0.02 mg/l	ACGIH BEI
METHYLBENZENE		Toluene	Urine	End of	0.03 mg/l	ACGIH BEI

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				shift (As soon as possible after exposure ceases)		
METHYLBENZENE		o-Cresol	Urine	End of shift (As soon as possible after exposure ceases)	0.3 mg/g	ACGIH BEI
Remarks: Creatinine						
Methanol	67-56-1	Methanol	Urine	End of shift (As soon as possible after exposure ceases)	15 mg/l	ACGIH BEI
ETHYLBENZENE	100-41-4	Sum of mandelic acid and phenyl glyoxylic acid	Urine	End of shift at end of workweek	700 mg/g	ACGIH BEI
Remarks: Creatinine						
ETHYLBENZENE		Ethylbenzene	In end-exhaled air	Not critical		ACGIH BEI

Personal protective equipment

Respiratory protection : In the case of vapour formation use a respirator with an approved filter.
In the case of dust or aerosol formation use respirator with an approved filter.

Hand protection
Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection : Eye wash bottle with pure water
Tightly fitting safety goggles
Wear face-shield and protective suit for abnormal processing problems.

Skin and body protection : impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures : When using do not eat or drink.
When using do not smoke.
Wash hands before breaks and at the end of workday.

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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Aerosol containing a compressed gas
Colour	: colourless
Odour	: strong, solvent-like
Odour Threshold	: no data available
pH	: not applicable
Melting point/freezing point	: not applicable
Boiling point	: 132 °C
Flash point	: not applicable
Evaporation rate	: no data available
Upper explosion limit	: not applicable
Lower explosion limit	: not applicable
Vapour pressure	: no data available
Relative vapour density	: no data available
Density	: 0.814 g/cm ³
Solubility(ies)	
Water solubility	: insoluble
Partition coefficient: n-octanol/water	: no data available
Auto-ignition temperature	: not determined
Thermal decomposition	: no data available
Viscosity	
Viscosity, kinematic	: no data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Stable
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Vapours may form explosive mixture with air.
Conditions to avoid	: Heat, flames and sparks.
Incompatible materials	: Oxidizing agents
Hazardous decomposition products	: Carbon oxides Organic Substances

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SECTION 11. TOXICOLOGICAL INFORMATION**Acute toxicity****Product:**

Acute oral toxicity : Acute toxicity estimate : 801.21 mg/kg
Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate : 3 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate : 1,995 mg/kg
Method: Calculation method

Skin corrosion/irritation**Product:**

Remarks: Irritating to skin.

Serious eye damage/eye irritation**Product:**

Remarks: May cause irreversible eye damage.

Respiratory or skin sensitisation

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

no data available

Reproductive toxicity

no data available

acetone:

toluene:

methanol:

xylenes:

carbon dioxide:

ethylbenzene:

STOT - single exposure

no data available

STOT - repeated exposure

no data available

Aspiration toxicity

no data available

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Further information
Product:

Remarks: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting., Concentrations substantially above the TLV value may cause narcotic effects., Solvents may degrease the skin.

SECTION 12. ECOLOGICAL INFORMATION
Ecotoxicity

no data available

Persistence and degradability

no data available

Bioaccumulative potential
Product:

Partition coefficient: n-octanol/water : Remarks: no data available

Components:
toluene :

Partition coefficient: n-octanol/water : Pow: 2.73

xylenes :

Partition coefficient: n-octanol/water : Pow: 3.12

ethylbenzene :

Partition coefficient: n-octanol/water : Pow: 3.6

Mobility in soil

no data available

Other adverse effects

no data available

Product:

Regulation 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances

Remarks This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Harmful to aquatic life.

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SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

- Waste from residues : The product should not be allowed to enter drains, water courses or the soil.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Dispose of in accordance with local regulations.
- Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.
Do not burn, or use a cutting torch on, the empty drum.
-

SECTION 14. TRANSPORT INFORMATION**International regulation****IATA-DGR**

- UN/ID No. : 1950
Proper shipping name : Aerosols, flammable
Class : 2.1
Packing group : Not Assigned
Labels : 2.1
Packing instruction (cargo aircraft) : 203
Packing instruction (passenger aircraft) : 203

IMDG-Code

- UN number : 1950
Proper shipping name : AEROSOLS
Class : 2.1
Packing group : Not Assigned
Labels : 2.1
EmS Code : F-D, S-U
Marine pollutant : no

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations**49 CFR**

- UN/ID/NA number : 1950
Proper shipping name : Aerosols
Class : 2.1
Packing group : Not Assigned
Labels : 2.1

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ERG Code : 126
 Marine pollutant : no

Special precautions for user

not applicable

SECTION 15. REGULATORY INFORMATION
EPCRA - Emergency Planning and Community Right-to-Know Act
CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
xylenes	1330-20-7	100	1067

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Fire Hazard
 Sudden Release of Pressure Hazard
 Acute Health Hazard
 Chronic Health Hazard

SARA 302 : SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : The following components are subject to reporting levels established by SARA Title III, Section 313:

toluene	108-88-3	20 %
methanol	67-56-1	12.4812 %
ethylbenzene	100-41-4	3.125 %

California Prop 65 WARNING! This product contains a chemical known to the State of California to cause cancer.

ethylbenzene	100-41-4
--------------	----------

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

toluene	108-88-3
methanol	67-56-1

The components of this product are reported in the following inventories:

TSCA On TSCA Inventory
DSL All components of this product are on the Canadian DSL.
AICS On the inventory, or in compliance with the inventory
NZIoC On the inventory, or in compliance with the inventory
PICCS On the inventory, or in compliance with the inventory

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IECSC On the inventory, or in compliance with the inventory

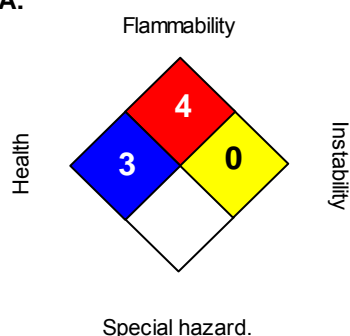
Inventory Acronym and Validity Area Legend:

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

SECTION 16. OTHER INFORMATION

Further information

NFPA:



HMIS III:

HEALTH	3*
FLAMMABILITY	4
PHYSICAL HAZARD	2

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

OSHA GHS Label Information:

Hazard pictograms



Signal word

Hazard statements

Danger:
Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Harmful if swallowed, in contact with skin or if inhaled. Causes skin irritation. Causes serious eye damage. May cause drowsiness or dizziness. Suspected of causing cancer. Suspected of damaging fertility or the unborn child. Causes damage to organs. May cause damage to organs through prolonged or repeated exposure if inhaled.

Precautionary statements

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Do not breathe dust/fume/gas/mist/vapours/spray. Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear eye protection/face protection. Wear protective gloves/protective clothing. Use personal protective equipment as required.
Response: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. IF ON SKIN: Wash with plenty of soap and water. IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or doctor/physician if you feel unwell. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. IF exposed: Call a POISON CENTER or doctor/physician. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.
Storage: Store in a well-ventilated place. Keep container tightly closed. Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.

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Disposal: Dispose of contents/container in accordance with local regulation.

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. Users should make their own investigations to determine the suitability and applicability of the information for their particular purposes. This SDS has been prepared by the Compliance Services organization supporting this manufacturer, supplier or distributor.

Zep Inc. markets products under well recognized and established brand names such as Zep®, Zep Commercial®, Zep Professional®, Enforcer®, National Chemical™, Selig™, Misty®, Next Dimension™, Petro®, i-Chem®, TimeMist®, TimeWick™, MicrobeMax®, Country Vet®, Konk®, Original Bike Spirits®, Blue Coral®, Black Magic®, Rain-X®, Niagara National™, FC Forward Chemicals®, Rexodan®, Mykal™, and a number of private labeled brands.

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SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : ZEP FORMULA 7961_275GL

Material number : 000000000000109889

Manufacturer or supplier's details

Company : Zep Inc.

Address : 350 Joe Frank Harris Parkway, SE
Emerson, GA 30137

Telephone : 404-352-1680

Emergency telephone numbers
For SDS Information : Compliance Services 1-877-428-9937

For a Medical Emergency : 877-541-2016 Toll Free - All Calls Recorded

For a Transportation Emergency : CHEMTREC: 800-424-9300 - All Calls Recorded.
In the District of Columbia 202-483-7616

Recommended use of the chemical and restrictions on use

Recommended use : Specialty Cleaner and Remover

SECTION 2. HAZARDS IDENTIFICATION
Emergency Overview

Appearance	liquid
Colour	colourless, clear
Odour	mild

GHS Classification

Skin corrosion : Category 1

Serious eye damage : Category 1

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H314 Causes severe skin burns and eye damage.

 Precautionary statements : **Prevention:**
 P264 Wash skin thoroughly after handling.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
 P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

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P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

P363 Wash contaminated clothing before reuse.

Disposal:

P501 Dispose of contents/container in accordance with local regulation.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical name	CAS-No.	Concentration [%]
orthophosphoric acid	7664-38-2	>= 30 - < 50
Alcohols, C9-11, ethoxylated	68439-46-3	>= 1 - < 3

The exact percentages of disclosed substances are withheld as trade secrets.

SECTION 4. FIRST AID MEASURES

- General advice : Move out of dangerous area.
Get medical attention immediately.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.
- If inhaled : If unconscious, place in recovery position and seek medical advice.
If symptoms persist, call a physician.
- In case of skin contact : Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.
Wash off immediately with plenty of water for at least 15 minutes.
Remove contaminated clothing and shoes.
Wash contaminated clothing before reuse.
If skin irritation persists, call a physician.
- In case of eye contact : Small amounts splashed into eyes can cause irreversible tissue damage and blindness.
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Remove contact lenses.
Protect unharmed eye.

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- Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
- If swallowed : Keep respiratory tract clear.
DO NOT induce vomiting unless directed to do so by a physician or poison control center.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
Take victim immediately to hospital.
- Most important symptoms and effects, both acute and delayed : Effects are immediate and delayed.
Symptoms may include blistering, irritation, burns, and pain.
Effects are dependent on exposure (dose, concentration, contact time).
Causes severe skin burns and eye damage.
Review section 2 of SDS to see all potential hazards.
- Notes to physician : Treat symptomatically. Symptoms may be delayed.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : Carbon dioxide (CO₂)
Carbon monoxide
Smoke
Phosphorus compounds
- Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Further information : Standard procedure for chemical fires.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
- Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
- Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.

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If the product contaminates rivers and lakes or drains, inform respective authorities.

Methods and materials for containment and cleaning up : Neutralize with chalk, alkali solution or ammonia.
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Do not breathe vapours/dust.
Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
To avoid spills during handling keep bottle on a metal tray.
Dispose of rinse water in accordance with local and national regulations.

Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.
Observe label precautions.
Electrical installations / working materials must comply with the technological safety standards.

Materials to avoid : Keep away from oxidizing agents and strongly acid or alkaline materials.
Do not freeze.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
orthophosphoric acid	7664-38-2	TWA	1 mg/m ³	ACGIH
		STEL	3 mg/m ³	ACGIH
		TWA	1 mg/m ³	NIOSH REL
		ST	3 mg/m ³	NIOSH REL
		TWA	1 mg/m ³	OSHA Z-1
		TWA	1 mg/m ³	OSHA P0
		STEL	3 mg/m ³	OSHA P0
		PEL	1 mg/m ³	CAL PEL
		STEL	3 mg/m ³	CAL PEL

Engineering measures : effective ventilation in all processing areas

Personal protective equipment

Respiratory protection : Use respiratory protection unless adequate local exhaust

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ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.

Hand protection	
Material	: Protective gloves
Remarks	: The suitability for a specific workplace should be discussed with the producers of the protective gloves.
Eye protection	: Access to clean water to rinse eyes must be available, options include: eye wash stations or showers, or eye wash bottles with pure water. Tightly fitting safety goggles Wear face-shield and protective suit for abnormal processing problems.
Skin and body protection	: Impervious clothing Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Hygiene measures	: When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Colour	: colourless, clear
Odour	: mild
Odour Threshold	: No data available
pH	: 1 - 1.5
Melting point/freezing point	: No data available
Boiling point	: 107.22 °C
Flash point	: Not applicable
Evaporation rate	: 1
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: Not applicable
Relative vapour density	: No data available
Density	: 1.259 g/cm ³
Solubility(ies)	
Water solubility	: soluble
Partition coefficient: n-	: No data available

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octanol/water

Auto-ignition temperature : not determined

Thermal decomposition : No data available

Viscosity

Viscosity, kinematic : 6.0 mm²/s (20 °C)**SECTION 10. STABILITY AND REACTIVITY**

Reactivity : Stable

Chemical stability : Stable under normal conditions.

Possibility of hazardous reactions : No dangerous reaction known under conditions of normal use.

Conditions to avoid : Extremes of temperature and direct sunlight.

Incompatible materials : Bases
Oxidizing agentsHazardous decomposition products : Carbon oxides
Phosphorus compounds**SECTION 11. TOXICOLOGICAL INFORMATION****Potential Health Effects**

Aggravated Medical Condition : None known.

Symptoms of Overexposure : Effects are immediate and delayed.
Symptoms may include blistering, irritation, burns, and pain.
Effects are dependent on exposure (dose, concentration, contact time).**Carcinogenicity:****IARC** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.**ACGIH** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.**OSHA** No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.**NTP** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

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Acute toxicity**Product:**

Acute oral toxicity : Acute toxicity estimate : > 5,000 mg/kg
Method: Calculation method

Components:**Alcohols, C9-11, ethoxylated:**

Acute oral toxicity : LD50 Oral Rat: 1,400 mg/kg

Skin corrosion/irritation**Product:**

Remarks: Extremely corrosive and destructive to tissue.

Serious eye damage/eye irritation**Product:**

Remarks: May cause irreversible eye damage.

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

STOT - single exposure

No data available

STOT - repeated exposure

No data available

Aspiration toxicity

No data available

Further information**Product:**

Remarks: No data available

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SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity**

No data available

Persistence and degradability

No data available

Bioaccumulative potential**Product:**

Partition coefficient: n-octanol/water : Remarks: No data available

Mobility in soil

No data available

Other adverse effects

No data available

Product:

Regulation 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances

Remarks This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information : No data available

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

Waste from residues : Do not dispose of waste into sewer. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of in accordance with local regulations.

Contaminated packaging : Empty remaining contents. Dispose of as unused product. Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

Transportation Regulation: 49 CFR (USA): UN3264, Corrosive liquid, acidic, inorganic, n.o.s., (PHOSPHORIC ACID), 8, III
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Transportation Regulation: IMDG (Vessel):
UN3264, CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., (PHOSPHORIC ACID), 8, III

Transportation Regulation: IATA (Cargo Air):
UN3264, Corrosive liquid, acidic, inorganic, n.o.s., (PHOSPHORIC ACID), 8, III

Transportation Regulation: IATA (Passenger Air):
UN3264, Corrosive liquid, acidic, inorganic, n.o.s., (PHOSPHORIC ACID), 8, III

Transportation Regulation: TDG (Canada):
UN3264, CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., (PHOSPHORIC ACID), 8, III

The product as delivered to the customer conforms to packaging requirements for shipment by road under US Department of Transportation (DOT) regulations. Additional transportation classifications noted above are for reference only, and not a certification or warranty of the suitability of the packaging for shipment under these alternative transport regulations.

SECTION 15. REGULATORY INFORMATION

TSCA list : No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
orthophosphoric acid	7664-38-2	5000	*

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Skin corrosion or irritation
Serious eye damage or eye irritation

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop. 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other

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reproductive harm.

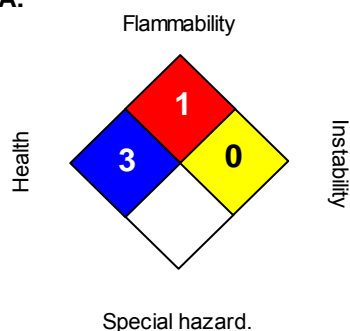
The components of this product are reported in the following inventories:

DSL All components of this product are on the Canadian DSL
TSCA On TSCA Inventory

For information on the country notification status for other regions please contact the manufacturer's regulatory group.

Inventory Acronym and Validity Area Legend:

TSCA (USA), DSL (Canada), NDSL (Canada)

SECTION 16. OTHER INFORMATION
Further information
NFPA:

HMIS III:

HEALTH	3
FLAMMABILITY	1
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,
 2 = Moderate, 3 = High
 4 = Extreme, * = Chronic

OSHA - GHS Label Information:

Hazard pictograms :



Signal word :

: **Danger:**

Hazard statements :

: Causes severe skin burns and eye damage.

Precautionary statements :

:

Prevention: Wash skin thoroughly after handling. Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. Wash contaminated clothing before reuse.

Disposal: Dispose of contents/container in accordance with local regulation.

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We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. Users should make their own investigations to determine the suitability and applicability of the information for their particular purposes.

This SDS has been prepared by the Compliance Services organization supporting this manufacturer, supplier or distributor.

Zep Inc. markets products under well recognized and established brand names such as Zep®, Zep Commercial®, Zep Professional®, Enforcer®, National Chemical™, Selig™, Misty®, Next Dimension™, Petro®, i-Chem®, TimeMist®, TimeWick™, MicrobeMax®, Country Vet®, Konk®, Original Bike Spirits®, Blue Coral®, Black Magic®, Rain-X®, Niagara National™, FC Forward Chemicals®, Rexodan®, Mykal™, and a number of private labeled brands.

SAFETY DATA SHEET

ZEP INDUSTRIAL PURPLE DEGREASER & CLEANER

Version 3.1

Revision Date 04/23/2020

Print Date 08/29/2022

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : ZEP INDUSTRIAL PURPLE DEGREASER & CLEANER

Material number : R42310

Manufacturer or supplier's details

Company : Zep Inc.

Address : 350 Joe Frank Harris Parkway, SE
Emerson, GA 30137

Telephone : 404-352-1680

Emergency telephone numbers

For SDS Information : Compliance Services 1-877-428-9937

For a Medical Emergency : 877-541-2016 Toll Free - All Calls Recorded

**For a Transportation
Emergency** : CHEMTREC: 800-424-9300 - All Calls Recorded.
In the District of Columbia 202-483-7616

Recommended use of the chemical and restrictions on use

Note: This product is labeled as a consumer product in accordance with the United States Consumer Product Safety Commission regulations. The warnings presented below in this Safety Data Sheet (SDS) comply with the 2012 OSHA Hazard Communication Standard (GHS - Globally Harmonized System of Classification and Labeling). The requirements for the labeling and warnings of consumer products may differ from those required for GHS based hazard communication.

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	liquid
Colour	clear, purple
Odour	characteristic

GHS Classification

Skin corrosion : Category 1

Serious eye damage : Category 1

GHS label elements

Hazard pictograms :



Corrosion

Signal word : Danger

Hazard statements : H314 Causes severe skin burns and eye damage.

Precautionary statements : **Prevention:**
P264 Wash skin thoroughly after handling.

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P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

P363 Wash contaminated clothing before reuse.

Disposal:

P501 Dispose of contents/container in accordance with local regulation.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical name	CAS-No.	Concentration [%]
Alcohols, C9-11, ethoxylated	68439-46-3	>= 1 - < 5
Oxirane, methyl-, polymer with oxirane, mono(2-ethylhexyl) ether	64366-70-7	>= 1 - < 5

The exact percentages of disclosed substances are withheld as trade secrets.

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.
Get medical attention.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.

If inhaled : If unconscious, place in recovery position and seek medical advice.
If symptoms persist, call a physician.

In case of skin contact : Wash off immediately with plenty of water for at least 15 minutes.
Remove contaminated clothing and shoes.
Wash contaminated clothing before reuse.
If skin irritation persists, call a physician.

In case of eye contact : Rinse immediately with plenty of water for at least 15 minutes.
Remove contact lenses.
Protect unharmed eye.

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- Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
- If swallowed : Keep respiratory tract clear.
DO NOT induce vomiting unless directed to do so by a physician or poison control center.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
Take victim immediately to hospital.
- Most important symptoms and effects, both acute and delayed : Effects are dependent on exposure (dose, concentration, contact time).
Effects are immediate and delayed.
Symptoms may include blistering, irritation, burns, and pain.
Causes severe skin burns and eye damage.
Review section 2 of SDS to see all potential hazards.
- Notes to physician : Treat symptomatically. Symptoms may be delayed.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : Carbon dioxide (CO₂)
Carbon monoxide
Smoke
- Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Standard procedure for chemical fires.
- Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
- Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains, inform

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respective authorities.

Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Do not breathe vapours or spray mist.
Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Dispose of rinse water in accordance with local and national regulations.

Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.
Observe label precautions.
Electrical installations / working materials must comply with the technological safety standards.

Materials to avoid : Do not store near acids.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Engineering measures : effective ventilation in all processing areas

Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally required.

Hand protection

Material

Remarks

: Protective gloves
: The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection

: Access to clean water to rinse eyes must be available, options include: eye wash stations or showers, or eye wash bottles with pure water.
Wear safety glasses with side shields or goggles.

Skin and body protection

: Impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures

: When using do not eat or drink.

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When using do not smoke.
Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Colour	: clear, purple
Odour	: characteristic
Odour Threshold	: No data available
pH	: 11.50
Melting point/freezing point	: No data available
Boiling point	: No data available
Flash point	: Not applicable
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: No data available
Density	: 1.007 g/cm ³
Bulk density	: No data available
Solubility(ies)	
Water solubility	: completely soluble
Solubility in other solvents	: not determined
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Thermal decomposition	: No data available
Viscosity	
Viscosity, dynamic	: No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Stable
Chemical stability	: Stable under normal conditions.
Possibility of hazardous	: No decomposition if stored and applied as directed.

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reactions
Conditions to avoid : Extremes of temperature and direct sunlight.

Incompatible materials : Acids

Hazardous decomposition products : Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects

Aggravated Medical Condition : None known.

Symptoms of Overexposure : Effects are dependent on exposure (dose, concentration, contact time).
Effects are immediate and delayed.
Symptoms may include blistering, irritation, burns, and pain.
Causes severe skin burns and eye damage.
Review section 2 of SDS to see all potential hazards.
Treat symptomatically. Symptoms may be delayed.

Carcinogenicity:

IARC No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

OSHA No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Acute toxicity

Product:

Acute oral toxicity : Acute toxicity estimate : > 5,000 mg/kg
Method: Calculation method

Components:

Alcohols, C9-11, ethoxylated:

Acute oral toxicity : LD50 Oral Rat: 1,400 mg/kg

Skin corrosion/irritation

Product:

Remarks: Extremely corrosive and destructive to tissue.

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Serious eye damage/eye irritation

Product:

Remarks: Risk of serious damage to eyes.

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

STOT - single exposure

No data available

STOT - repeated exposure

No data available

Aspiration toxicity

No data available

Further information

Product:

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

No data available

Persistence and degradability

No data available

Bioaccumulative potential

Product:

Partition coefficient: n-octanol/water : Remarks: No data available

Mobility in soil

No data available

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Other adverse effects

No data available

Product:

Regulation 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances

Remarks This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information : No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Do not dispose of waste into sewer.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Dispose of in accordance with local regulations.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

Transportation Regulation: 49 CFR (USA):
UN3266, Corrosive liquid, basic, inorganic, n.o.s., (SODIUM HYDROXIDE), 8, III - Limited quantity

Transportation Regulation: IMDG (Vessel):
UN3266, CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S., (SODIUM HYDROXIDE), 8, III - Limited quantity

Transportation Regulation: IATA (Cargo Air):
UN3266, Corrosive liquid, basic, inorganic, n.o.s., (SODIUM HYDROXIDE), 8, III

Transportation Regulation: IATA (Passenger Air):
UN3266, Corrosive liquid, basic, inorganic, n.o.s., (SODIUM HYDROXIDE), 8, III

Transportation Regulation: TDG (Canada):
UN3266, CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S., (SODIUM HYDROXIDE), 8, III - Limited quantity

The product as delivered to the customer conforms to packaging requirements for shipment by road under US Department of Transportation (DOT) regulations. Additional transportation classifications noted above are for reference only, and not a certification or warranty of the suitability of the packaging for shipment under these alternative transport regulations.

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SECTION 15. REGULATORY INFORMATION

TSCA list : No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
sodium hydroxide	1310-73-2	1000	*

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Skin corrosion or irritation
Serious eye damage or eye irritation

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop. 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

The components of this product are reported in the following inventories:

DSL All components of this product are on the Canadian DSL
TSCA On TSCA Inventory

For information on the country notification status for other regions please contact the manufacturer's regulatory group.

Inventory Acronym and Validity Area Legend:

TSCA (USA), DSL (Canada), NDSL (Canada)

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SECTION 16. OTHER INFORMATION

Further information

NFPA:

HEALTH	3
FLAMMABILITY	1
INSTABILITY	0
SPECIAL HAZARD.	

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme

HMIS III:

HEALTH	3
FLAMMABILITY	1
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

OSHA - GHS Label Information:

Hazard pictograms



Corrosion

Signal word

Hazard statements

Precautionary statements

: **Danger:**
: Causes severe skin burns and eye damage.

Prevention: Wash skin thoroughly after handling. Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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Immediately call a POISON CENTER/doctor. Wash contaminated clothing before reuse.

Disposal: Dispose of contents/container in accordance with local regulation.

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We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. Users should make their own investigations to determine the suitability and applicability of the information for their particular purposes. This SDS has been prepared by the Compliance Services organization supporting this manufacturer, supplier or distributor.

Zepreserve

Version 1.0

Revision Date 10/27/2014

Print Date 08/05/2015

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : Zepreserve
 Material number : 000000000000143499

Manufacturer or supplier's details

Company : Zep Inc.
 Address : 1310 Seaboard Industrial Blvd., NW
 Atlanta, GA 30318
 Telephone : 404-352-1680

Emergency telephone numbers

For SDS Information : Compliance Services 1-877-428-9937
For a Medical Emergency : 877-541-2016 Toll Free - All Calls Recorded
For a Transportation Emergency : CHEMTREC: 800-424-9300 - All Calls Recorded.
 In the District of Columbia 202-483-7616

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Physical state	liquid
Colour	dark brown, clear
Odour	neutral

GHS Classification

Flammable liquids : Category 3
 Skin irritation : Category 2
 Eye irritation : Category 2A
 Aspiration hazard : Category 1

GHS Label element

Hazard pictograms :



Signal word : Danger

Hazard statements : H226 Flammable liquid and vapour.
 H304 May be fatal if swallowed and enters airways.
 H315 Causes skin irritation.
 H319 Causes serious eye irritation.

Precautionary statements : **Prevention:**
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P233 Keep container tightly closed.

Zepreserve

Version 1.0

Revision Date 10/27/2014

Print Date 08/05/2015

P240 Ground/bond container and receiving equipment.
 P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.
 P242 Use only non-sparking tools.
 P243 Take precautionary measures against static discharge.
 P264 Wash skin thoroughly after handling.
 P280 Wear protective gloves/ eye protection/ face protection.

Response:

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.
 P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P331 Do NOT induce vomiting.
 P332 + P313 If skin irritation occurs: Get medical advice/ attention.
 P337 + P313 If eye irritation persists: Get medical advice/ attention.
 P362 Take off contaminated clothing and wash before reuse.
 P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

Storage:

P403 + P235 Store in a well-ventilated place. Keep cool.
 P405 Store locked up.

Disposal:

P501 Dispose of contents/container in accordance with local regulation.

Potential Health Effects**Carcinogenicity:**

IARC No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

OSHA No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical Name	CAS-No.	Concentration [%]
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Distillates (petroleum), hydrotreated light	64742-47-8	>= 50 - < 70
2-ethylhexan-1-ol	104-76-7	>= 5 - < 10
2-(2-butoxyethoxy)ethanol	112-34-5	>= 5 - < 10

SECTION 4. FIRST AID MEASURES

- General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Symptoms of poisoning may appear several hours later.
Do not leave the victim unattended.
- If inhaled : If unconscious place in recovery position and seek medical advice.
If symptoms persist, call a physician.
- In case of skin contact : If skin irritation persists, call a physician.
If on skin, rinse well with water.
If on clothes, remove clothes.
- In case of eye contact : Immediately flush eye(s) with plenty of water.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
- If swallowed : Keep respiratory tract clear.
Do NOT induce vomiting.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
Take victim immediately to hospital.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Alcohol-resistant foam
Carbon dioxide (CO₂)
Dry chemical
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : Carbon dioxide (CO₂)
Carbon monoxide
Smoke
- Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

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For safety reasons in case of fire, cans should be stored separately in closed containments.
Use a water spray to cool fully closed containers.

Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
Ensure adequate ventilation.
Remove all sources of ignition.
Evacuate personnel to safe areas.
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Avoid formation of aerosol.
Do not breathe vapours/dust.
Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Take precautionary measures against static discharges.
Provide sufficient air exchange and/or exhaust in work rooms.
Open drum carefully as content may be under pressure.
Dispose of rinse water in accordance with local and national regulations.

Conditions for safe storage : No smoking.
Keep container tightly closed in a dry and well-ventilated place.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Observe label precautions.
Electrical installations / working materials must comply with the technological safety standards.

Materials to avoid : Keep away from oxidising agents and strongly acid or alkaline materials.

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SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Components with workplace control parameters**

Contains no substances with occupational exposure limit values.

Personal protective equipment

Hand protection

Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection

: Eye wash bottle with pure water
Tightly fitting safety goggles
Wear face-shield and protective suit for abnormal processing problems.

Skin and body protection

: impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures

: When using do not eat or drink.
When using do not smoke.
Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Colour	: dark brown, clear
Odour	: neutral
Odour Threshold	: no data available
pH	: no data available
Melting point/freezing point	: no data available
Boiling point	: 151.7 °C
Flash point	: 43.9 °C Method: closed cup
Evaporation rate	: 0.1
Upper explosion limit	: no data available
Lower explosion limit	: no data available
Vapour pressure	: no data available
Relative vapour density	: no data available
Density	: 0.826 g/cm ³
Solubility(ies)	
Water solubility	: insoluble

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Partition coefficient: n-octanol/water	:	no data available
Auto-ignition temperature	:	not determined
Thermal decomposition	:	no data available
Viscosity	:	
Viscosity, kinematic	:	7 mm ² /s (20 °C)

SECTION 10. STABILITY AND REACTIVITY

Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	No decomposition if stored and applied as directed. Vapours may form explosive mixture with air.
Conditions to avoid	:	Heat, flames and sparks.
Incompatible materials	:	Oxidizing agents
Hazardous decomposition products	:	Carbon oxides Sulphur oxides

SECTION 11. TOXICOLOGICAL INFORMATION**Acute toxicity****Product:**

Acute oral toxicity : Acute toxicity estimate : > 5,000 mg/kg
Method: Calculation method

Components:**2-ethylhexan-1-ol:**

Acute oral toxicity : LD50 Oral rat: 3,730 mg/kg

Acute dermal toxicity : LD50 Dermal rabbit: > 3,000 mg/kg

Skin corrosion/irritation**Product:**

Remarks: Irritating to skin.

Serious eye damage/eye irritation**Product:**

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Remarks: Irritating to eyes.

Respiratory or skin sensitisation

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

no data available

Reproductive toxicity

no data available

Distillates (petroleum), hydrotreated light:**2-ethylhexan-1-ol:****2-(2-butoxyethoxy)ethanol:****STOT - single exposure**

no data available

STOT - repeated exposure

no data available

Aspiration toxicity

no data available

Further information**Product:**

Remarks: Solvents may degrease the skin.

Components:**Distillates (petroleum), hydrotreated light:**

Remarks: no data available

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity**

no data available

Persistence and degradability

no data available

Bioaccumulative potential**Product:**Partition coefficient: n- : Remarks: no data available
octanol/water**Components:****2-ethylhexan-1-ol :**

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Partition coefficient: n-octanol/water : Pow: 2.9
2-(2-butoxyethoxy)ethanol :
 Partition coefficient: n-octanol/water : Pow: 1

Mobility in soil

no data available

Other adverse effects

no data available

Product:

Regulation	40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances
Remarks	This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).
Additional ecological information	: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Toxic to aquatic life with long lasting effects.

Components:

Distillates (petroleum), hydrotreated light :

Additional ecological information : no data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues	: The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of in accordance with local regulations.
Contaminated packaging	: Empty remaining contents. Dispose of as unused product. Do not re-use empty containers. Do not burn, or use a cutting torch on, the empty drum.

SECTION 14. TRANSPORT INFORMATION

International regulation

IATA-DGR
 UN/ID No. : 1993

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Proper shipping name	: Flammable liquid, n.o.s. (PETROLEUM DISTILLATES)
Class	: 3
Packing group	: III
Labels	: 3
Packing instruction (cargo aircraft)	: 366
Packing instruction (passenger aircraft)	: 355
IMDG-Code	
UN number	: 1993
Proper shipping name	: FLAMMABLE LIQUID, N.O.S. (PETROLEUM DISTILLATES)
Class	: 3
Packing group	: III
Labels	: 3
EmS Code	: F-E, <u>S-E</u>
Marine pollutant	: no

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations

49 CFR	
UN/ID/NA number	: 1993
Proper shipping name	: Flammable liquids, n.o.s. (PETROLEUM DISTILLATES)
Class	: 3
Packing group	: III
Labels	: 3
ERG Code	: 128
Marine pollutant	: no

Special precautions for user

not applicable

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

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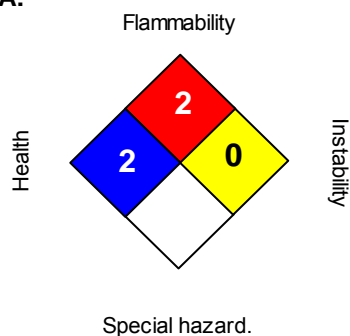
- SARA 311/312 Hazards** : Fire Hazard
Acute Health Hazard
- SARA 302** : SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
- SARA 313** : SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
- California Prop 65** This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

The components of this product are reported in the following inventories:

- TSCA** On TSCA Inventory
DSL All components of this product are on the Canadian DSL.
AICS On the inventory, or in compliance with the inventory
NZIoC On the inventory, or in compliance with the inventory
PICCS On the inventory, or in compliance with the inventory
IECSC On the inventory, or in compliance with the inventory

Inventory Acronym and Validity Area Legend:

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

SECTION 16. OTHER INFORMATION**Further information****NFPA:****HMIS III:**

HEALTH	3
FLAMMABILITY	2
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,
 2 = Moderate, 3 = High
 4 = Extreme, * = Chronic

OSHA GHS Label Information:

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Hazard pictograms



Signal word

: **Danger:**

Hazard statements

: Flammable liquid and vapour. May be fatal if sw allowed and enters airways. Causes skin irritation. Causes serious eye irritation.

Precautionary statements

: **Prevention:** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ ventilating/ lighting/ equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wash skin thoroughly after handling. Wear protective gloves/ eye protection/ face protection.: **Response:** IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Do NOT induce vomiting. If skin irritation occurs: Get medical advice/ attention. If eye irritation persists: Get medical advice/ attention. Take off contaminated clothing and wash before reuse. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.: **Storage:** Store in a well-ventilated place. Keep cool. Store locked up.: **Disposal:** Dispose of contents/container in accordance with local regulation.

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. Users should make their own investigations to determine the suitability and applicability of the information for their particular purposes. This SDS has been prepared by the Compliance Services organization supporting this manufacturer, supplier or distributor.

Zep Inc. markets products under well recognized and established brand names such as Zep®, Zep Commercial®, Zep Professional®, Enforcer®, National Chemical™, Selig™, Misty®, Next Dimension™, Petro®, i-Chem®, TimeMist®, TimeWick™, MicrobeMax®, Country Vet®, Konk®, Original Bike Spirits®, Blue Coral®, Black Magic®, Rain-X®, Niagara National™, FC Forward Chemicals®, Rexodan®, Mykal™, and a number of private labeled brands.

Safety Data Sheet



1. Identification

Product Name:	BIN 1-GL 2 PK CLEAR	Revision Date:	7/17/2019
Product Identifier:	249200	Supersedes Date:	12/13/2017
Recommended Use:	Primer/ Sealer		
Supplier:	Rust-Oleum Corporation 11 Hawthorn Parkway Vernon Hills, IL 60061 USA	Manufacturer:	Rust-Oleum Corporation 11 Hawthorn Parkway Vernon Hills, IL 60061 USA
Preparer:	Regulatory Department		
Emergency Telephone:	24 Hour Hotline: 847-367-7700		

2. Hazard Identification

Classification

Symbol(s) of Product



Signal Word

Danger

Possible Hazards

23% of the mixture consists of ingredient(s) of unknown acute toxicity.

GHS HAZARD STATEMENTS

Flammable Liquid, category 1 H224 Extremely flammable liquid and vapour.

GHS LABEL PRECAUTIONARY STATEMENTS

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P370+P378	In case of fire: Use alcohol film forming foam, carbon dioxide, dry chemical, dry sand to extinguish.
P403+P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/container in accordance with local, regional and national regulations.

GHS SDS PRECAUTIONARY STATEMENTS

P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting/equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.

3. Composition / Information On Ingredients

HAZARDOUS SUBSTANCES

<u>Chemical Name</u>	<u>CAS-No.</u>	<u>Wt.% Range</u>	<u>GHS Symbols</u>	<u>GHS Statements</u>
Ethanol	64-17-5	50-75	GHS02	H225
Shellac	9000-59-3	10-25	Not Available	Not Available
2-Propanol	67-63-0	2.5-10	GHS02-GHS07	H225-302-319-336

4. First-Aid Measures

FIRST AID - EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids open. Get medical attention. Do NOT allow rubbing of eyes or keeping eyes closed.

FIRST AID - SKIN CONTACT: Wash skin with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists.

FIRST AID - INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention. Do NOT use mouth-to-mouth resuscitation. If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.

FIRST AID - INGESTION: Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. Get immediate medical attention. If swallowed, get medical attention.

5. Fire-Fighting Measures

EXTINGUISHING MEDIA: Alcohol Film Forming Foam, Carbon Dioxide, Dry Chemical, Water Fog

UNUSUAL FIRE AND EXPLOSION HAZARDS: Closed containers may explode when exposed to extreme heat due to buildup of steam. Vapors may form explosive mixtures with air. Vapors can travel to a source of ignition and flash back. Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame.

SPECIAL FIREFIGHTING PROCEDURES: Water may be used to cool closed containers to prevent pressure buildup and possible autoignition or explosion. Evacuate area and fight fire from a safe distance. Use water spray to keep fire-exposed containers cool. Containers may explode when heated.

Special Fire and Explosion Hazard (Combustible Dust): Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

6. Accidental Release Measures

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust. Eliminate all ignition sources; use explosion-proof equipment. Place material in a container and dispose of according to local, provincial, state and federal regulations. Remove all sources of ignition, ventilate area and remove with inert absorbent and non-sparking tools. Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers. Ventilate area, isolate spilled material, and remove with inert absorbent. Dispose of contaminated absorbent, container, and unused contents in accordance with local, state, and federal regulations.

7. Handling and Storage

HANDLING: Wash thoroughly after handling. Wash hands before eating. Remove contaminated clothing and launder before reuse. Use only with adequate ventilation. Follow all SDS and label precautions even after container is emptied because it may retain product residues. Avoid breathing fumes, vapors, or mist. Avoid contact with eyes, skin and clothing.

STORAGE: Store in a dry, well ventilated place. Keep container tightly closed when not in use. Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Do not store above 120 ° F. Store large quantities in buildings designed and protected for storage of NFPA Class II combustible liquids. Keep away from heat, sparks, flame and sources of ignition. Keep container closed when not in use. Avoid excess heat. Product should be stored in tightly sealed containers and protected from heat, moisture, and foreign materials.

Advice on Safe Handling of Combustible Dust: Minimize dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions such as grounding and bonding or inert atmospheres. For safe handling, refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids.

8. Exposure Controls / Personal Protection

Chemical Name	CAS-No.	Weight % Less Than	ACGIH TLV- TWA	ACGIH TLV- STEL	OSHA PEL-TWA	OSHA PEL- CEILING
Ethanol	64-17-5	70.0	N.E.	1000 ppm	1000 ppm	N.E.
Shellac	9000-59-3	25.0	N.E.	N.E.	N.E.	N.E.
2-Propanol	67-63-0	5.0	200 ppm	400 ppm	400 ppm	N.E.

PERSONAL PROTECTION

ENGINEERING CONTROLS: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation.

RESPIRATORY PROTECTION: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.

Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or in any other circumstances where air purifying respirators may not provide adequate protection.

SKIN PROTECTION: Use gloves to prevent prolonged skin contact. Use impervious gloves to prevent skin contact and absorption of this material through the skin. Nitrile or Neoprene gloves may afford adequate skin protection.

EYE PROTECTION: Use safety eyewear designed to protect against splash of liquids.

OTHER PROTECTIVE EQUIPMENT: Refer to safety supervisor or industrial hygienist for further guidance regarding types of personal protective equipment and their applications. Refer to safety supervisor or industrial hygienist for further information regarding personal protective equipment and its application.

HYGIENIC PRACTICES: Wash thoroughly with soap and water before eating, drinking or smoking. Remove contaminated clothing immediately and launder before reuse.

Engineering Measures for Combustible Dust: It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of the product contain explosion relief vents, an explosion suppression system, or an oxygen deficient environment. Ensure that dust handling systems such as exhaust ducts, dust collectors, vessels, and processing equipment are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Use only appropriately classified electrical equipment and powered industrial trucks.

9. Physical and Chemical Properties

Appearance:	Liquid	Physical State:	Liquid
Odor:	Solvent Like	Odor Threshold:	N.E.
Specific Gravity:	0.869	pH:	N.A.
Freeze Point, °C:	N.D.	Viscosity:	N.D.
Solubility in Water:	Slight	Partition Coefficient, n-octanol/ water:	N.D.
Decomposition Temp., °C:	N.D.	Explosive Limits, vol%:	3.3 - 19.0
Boiling Range, °C:	-18 - 100	Flash Point, °C:	13
Flammability:	Supports Combustion	Auto-ignition Temp., °C:	N.D.
Evaporation Rate:	Slower than Ether	Vapor Pressure:	N.D.
Vapor Density:	Heavier than Air		

(See "Other information" Section for abbreviation legend)

10. Stability and Reactivity

CONDITIONS TO AVOID: Avoid temperatures above 120°F (49°C). Avoid all possible sources of ignition.

INCOMPATIBILITY: Incompatible with strong oxidizing agents, strong acids and strong alkalis.

HAZARDOUS DECOMPOSITION: By open flame, carbon monoxide and carbon dioxide. When heated to decomposition, it emits acrid smoke and irritating fumes. Contains solvents which may form carbon monoxide, carbon dioxide, and formaldehyde.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: This product is stable under normal storage conditions.

11. Toxicological Information

EFFECTS OF OVEREXPOSURE - EYE CONTACT: Causes Serious Eye Irritation

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: Prolonged or repeated skin contact may cause irritation. Causes skin irritation. Allergic reactions are possible.

EFFECTS OF OVEREXPOSURE - INHALATION: Harmful if inhaled. High gas, vapor, mist or dust concentrations may be harmful if inhaled. Avoid breathing fumes, spray, vapors, or mist. May cause headaches and dizziness. High vapor concentrations are irritating to the eyes, nose, throat and lungs. Prolonged or excessive inhalation may cause respiratory tract irritation.

EFFECTS OF OVEREXPOSURE - INGESTION: Harmful if swallowed. Aspiration hazard if swallowed; can enter lungs and cause damage.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: High concentrations may lead to central nervous system effects (drowsiness, dizziness, nausea, headaches, paralysis, and blurred vision) and/or damage. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage.

PRIMARY ROUTE(S) OF ENTRY: Eye Contact, Ingestion, Inhalation, Skin Absorption, Skin Contact

ACUTE TOXICITY VALUES

The acute effects of this product have not been tested. Data on individual components are tabulated below:

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Vapor LC50</u>
64-17-5	Ethanol	7060 mg/kg Rat	15,800 mg/kg Rabbit	30,000 mg/L Rat
67-63-0	2-Propanol	1870 mg/kg Rat	4059 mg/kg Rabbit	72.6 mg/L Rat

N.E. - Not Established

12. Ecological Information

ECOLOGICAL INFORMATION: Product is a mixture of listed components. Product is a mixture of listed components.

13. Disposal Information

DISPOSAL INFORMATION: Do not incinerate closed containers. Dispose of material in accordance to local, state, and federal regulations and ordinances.

14. Transport Information

	<u>Domestic (USDOT)</u>	<u>International (IMDG)</u>	<u>Air (IATA)</u>	<u>TDG (Canada)</u>
UN Number:	N.A.	1263	1263	N.A.
Proper Shipping Name:	Paint Products in Limited Quantities	Paint	Paint	Paint Products in Limited Quantities
Hazard Class:	N.A.	3	3	N.A.
Packing Group:	N.A.	II	II	N.A.
Limited Quantity:	Yes	Yes	Cargo Aircraft Only	Yes

15. Regulatory Information

U.S. Federal Regulations:

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Flammable (gases, aerosols, liquids, or solids)

Sara Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

No Sara 313 components exist in this product.

Toxic Substances Control Act:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(b) if exported from the United States:

No TSCA 12(b) components exist in this product.

U.S. State Regulations:

California Proposition 65:

WARNING: No Prop. 65 warning is required.

16. Other Information

HMIS RATINGS

Health: 2 Flammability: 3 Physical Hazard: 0 Personal Protection: X

NFPA RATINGS

Health: 2 Flammability: 4 Instability: 0

Volatile Organic Compounds 654 g/L

SDS REVISION DATE: 7/17/2019

REASON FOR REVISION: Revision Description Changed
 Substance and/or Product Properties Changed in Section(s):
 11 - Toxicological Information
 14 - Transport Information
 15 - Regulatory Information
 16 - Other Information
 Revision Statement(s) Changed

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

The manufacturer believes, to the best of its knowledge, information and belief, the information contained herein to be accurate and reliable as of the date of this safety data sheet. However, because the conditions of handling, use, and storage of these materials are beyond our control, we assume no responsibility or liability for personal injury or property damage incurred by the use of these materials. The manufacturer makes no warranty, expressed or implied, regarding the accuracy or reliability of the data or results obtained from their use. All materials may present unknown hazards and should be used with caution. The information and recommendations in this material safety data sheet are offered for the users' consideration and examination. It is the responsibility of the user to determine the final suitability of this information and to comply with all applicable international, federal, state, and local laws and regulations.



SAFETY DATA SHEET

Zinsser Perma-White® Interior Eggshell

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

PRODUCT NAME	Zinsser Perma-White® Interior Eggshell
PRODUCT NO.	ZN7070001
APPLICATION	Intended for use as a brush-/roller-/spray-applied, single component, water-borne coating.
SUPPLIER	William Zinsser (UK) Ltd Portobello Industrial Estate Birtley County Durham England DH3 2RE +44(0)191 4106611 +44(0)191 4920125 enquiries@tor-coatings.com
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2 HAZARDS IDENTIFICATION

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

CLASSIFICATION (1999/45) R52/53.

ENVIRONMENT

The product contains a substance which is hazardous to aquatic organisms and which may cause long term adverse effects in the aquatic environment. See section 12.

HUMAN HEALTH

Prolonged contact may cause redness, irritation and dry skin. Prolonged and repeated contact with solvents over a long period may lead to permanent health problems.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content %	Classification (67/548/EEC)
SODIUM NITRITE	231-555-9	7632-00-0	< 1%	O;R8 T;R25 N;R50
ETHANEDIOL	203-473-3	107-21-1	< 1%	Xn;R22
2-(2-BUTOXYETHOXY)ETHANOL	203-961-6	112-34-5	< 1%	Xi;R36
ZINC OXIDE	215-222-5	1314-13-2	< 1%	N;R50/53

The Full Text for all R-Phrases is Displayed in Section 16

4 FIRST-AID MEASURES

GENERAL INFORMATION

General first aid, rest, warmth and fresh air. Do not give victim anything to drink if they are unconscious. Get medical attention if any discomfort continues.

INHALATION

Place unconscious person on the side in the recovery position and ensure breathing can take place. If respiratory problems, artificial respiration/oxygen. Get medical attention if any discomfort continues.

INGESTION

Immediately rinse mouth and drink plenty of water or milk. Keep person under observation. Do not induce vomiting. If vomiting occurs, keep head low. Transport immediately to hospital and bring along these instructions.

SKIN CONTACT

Use appropriate hand lotion to prevent defatting and cracking of skin. Immediately remove contaminated clothing. Wash off promptly and flush contaminated skin with water. Promptly remove clothing if soaked through and flush skin with water.

EYE CONTACT

Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Get medical attention promptly if symptoms occur after washing.

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5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

This product is not flammable. Use fire-extinguishing media appropriate for surrounding materials.

SPECIAL FIRE FIGHTING PROCEDURES

Use pressurised air mask if product is involved in a fire. Cool containers exposed to flames with water until well after the fire is out. Keep run-off water out of sewers and water sources. Dike for water control.

UNUSUAL FIRE & EXPLOSION HAZARDS

Fire causes formation of toxic gases.

PROTECTIVE MEASURES IN FIRE

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

Wear protective clothing as described in Section 8 of this safety data sheet.

ENVIRONMENTAL PRECAUTIONS

Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.

SPILL CLEAN UP METHODS

Absorb in vermiculite, dry sand or earth and place into containers. Wash thoroughly after dealing with a spillage.

7 HANDLING AND STORAGE

USAGE PRECAUTIONS

Avoid spilling, skin and eye contact. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level.

STORAGE PRECAUTIONS

Store in tightly closed original container in a dry, cool and well-ventilated place. Keep in original container. Avoid contact with oxidising agents.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
2-(2-BUTOXYETHOXY)ETHANOL		10 ppm	67.5 mg/m3	15 ppm	101.2 mg/m3	
ETHANEDIOL	WEL		52 mg/m3(Sk)		104 mg/m3(Sk)	

WEL = Workplace Exposure Limit.

INGREDIENT COMMENTS

WEL = Workplace Exposure Limits

PROTECTIVE EQUIPMENT



PROCESS CONDITIONS

Provide eyewash station.

ENGINEERING MEASURES

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded. All handling to take place in well-ventilated area.

RESPIRATORY EQUIPMENT

Provide adequate ventilation. Observe Occupational Exposure Limits and minimise the risk of inhalation of vapours.

HAND PROTECTION

Protective gloves should be used if there is a risk of direct contact or splash.

EYE PROTECTION

Wear splash-proof eye goggles to prevent any possibility of eye contact.

OTHER PROTECTION

Wear appropriate clothing to prevent any possibility of skin contact.

HYGIENE MEASURES

DO NOT SMOKE IN WORK AREA! Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

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9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Liquid
COLOUR	White / off-white.
ODOUR	Slight odour.
SOLUBILITY	Miscible with water
RELATIVE DENSITY	1.34 Approx. @20°C.
VAPOUR DENSITY (air=1)	Heavier than air

10 STABILITY AND REACTIVITY

STABILITY

No particular stability concerns.

HAZARDOUS DECOMPOSITION PRODUCTS

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

11 TOXICOLOGICAL INFORMATION

SKIN CONTACT

Prolonged contact may cause redness and irritation.

EYE CONTACT

Slightly irritating.

Name	SODIUM NITRITE
Toxic Dose 1 - LD 50	85 - 180 mg/kg (oral rat)
Toxic Dose 2 - LD 50	175 mg/kg (oral-mouse)
Toxic Conc. - LC 50	5.5 mg/l/4h (inh-rat)
Name	ETHANEDIOL
Toxic Dose 1 - LD 50	4700 mg/kg (oral rat)
Name	2-(2-BUTOXYETHOXY)ETHANOL
Toxic Dose 1 - LD 50	4500 - 5660 mg/kg (oral rat)
Toxic Dose 2 - LD 50	2400 - 6050 mg/kg (oral-mouse)
Name	ZINC OXIDE
Toxic Dose 1 - LD 50	>15000 mg/kg (oral rat)
Toxic Dose 2 - LD 50	7950 mg/kg (oral-mouse)
Toxic Conc. - LC 50	>5.7 mg/l/4h (inh-rat)

12 ECOLOGICAL INFORMATION

ECOTOXICITY

Dangerous for the environment: May cause long-term adverse effects in the aquatic environment.

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Name SODIUM NITRITE

Ecotoxicity

Very toxic to aquatic organisms.

LC 50, 96 Hrs, Fish mg/l 0.19 - 1.78

EC 50, 48 Hrs, Daphnia, mg/l 12.5 - 100

Mobility

The product is soluble in water.

Bioaccumulative potential

The product is not bioaccumulating.

Name ETHANEDIOL

LC 50, 96 Hrs, Fish mg/l >100

Name 2-(2-BUTOXYETHOXY)ETHANOL

Ecotoxicity

The product contains a substance which causes risk of hazardous effects to the environment.

LC 50, 96 Hrs, Fish mg/l 1300

EC 50, 48 Hrs, Daphnia, mg/l 100

Mobility

The product is soluble in water.

Bioaccumulative potential

This material is not expected to significantly bioaccumulate.

Degradability

The product is moderately biodegradable.

Name ZINC OXIDE

Ecotoxicity

The product must not be allowed to enter drains or water courses.

IC 50, 72 Hrs, Algae, mg/l 170

13 DISPOSAL CONSIDERATIONS

GENERAL INFORMATION

Waste to be treated as controlled waste. Disposal to licensed waste disposal site in accordance with local Waste Disposal Authority.

DISPOSAL METHODS

Dispose of waste and residues in accordance with local authority requirements. Absorb in vermiculite or dry sand and dispose of at a licensed hazardous waste collection point.

14 TRANSPORT INFORMATION

GENERAL

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

No transport warning sign required.

ENVIRONMENTALLY HAZARDOUS SUBSTANCE/MARINE POLLUTANT

No.

15 REGULATORY INFORMATION

RISK PHRASES

R52/53

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

SAFETY PHRASES

S2

Keep out of the reach of children.

S23

Do not breathe vapour/spray.

S56

Dispose of this material and its container to hazardous or special waste collection point.

EU DIRECTIVES

System of specific information relating to Dangerous Preparations. 2001/58/EC. Dangerous Preparations Directive 1999/45/EC.

APPROVED CODE OF PRACTICE

Safety Data Sheets for Substances and Preparations. Classification and Labelling of Substances and Preparations Dangerous for Supply.

NATIONAL REGULATIONS

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2002. No. 1689. Workplace Exposure Limits 2005 (EH40)

16 OTHER INFORMATION

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INFORMATION SOURCES

Croner's Emergency Spillage Guide Croner's Emergency First Aid Guide Croner's Substances Hazardous to Health

REVISION COMMENTS

Amended in line with HSE requirements.

ISSUED BY

D Charles

REVISION DATE 27/07/2012

REV. NO./REPL. SDS GENERATED 10

SDS NO. 16304

SAFETY DATA SHEET STATUS

Approved.

DATE 27/07/2012

RISK PHRASES IN FULL

R8	Contact with combustible material may cause fire.
R22	Harmful if swallowed.
R36	Irritating to eyes.
R25	Toxic if swallowed.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R50	Very toxic to aquatic organisms.

DISCLAIMER

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.