

SAFETY DATA SHEET

Section 1 - Chemical Product and Company Information

Product Name: S-1193 Silicone Epoxy **Product Code:** S-1193

Trade Name: Glyptal

Manufactured by:

GLYPTAL, INC.
305 Eastern Ave.
Chelsea, MA 02150
Telephone (617) 884-6918

IN CASE OF EMERGENCY:

CHEMTREC 1-800-424-9300

Product Use: Coatings

Not recommended for: Nonindustrial Use

Section 2 - Hazards Identification

NFPA Ratings, risk phrases, and suggested WHMIS Hazard Categories:

GHS Ratings:

Flammable liquid	3	Flash point $\geq 23^{\circ}\text{C}$ and $\leq 60^{\circ}\text{C}$ (140°F)
Acute Toxicity - Dermal	4	Dermal >1000 and ≤ 2000 mg/kg
Acute Toxicity - Inhalation	4	Gases >2500 and ≤ 20000 ppm, Vapors >10 and ≤ 20 mg/l, Dusts&mists >1 and ≤ 5 mg/l
Skin corrosion/irritation	2	Reversible adverse effects in dermal tissue, Draize score: ≥ 2.3 < 4.0 or persistent inflammation
Serious eye damage/eye irritation	1	Serious eye damage: Irreversible damage 21 days after exposure, Draize score: Corneal opacity ≥ 3 , Iritis > 1.5
Carcinogenicity	2	Limited evidence of human or animal carcinogenicity
Reproductive toxicity	1B	Presumed, Based on experimental animals
Specific target organ toxicity single exposure	3	Transient target organ effects- Narcotic effects- Respiratory tract irritation
Aspiration hazard	1	Aspiration Toxicity Category 1: Known (regarded)- human evidence - hydrocarbons with kinematic viscosity $< \text{or} = 20.5$ mm ² /s at 40° C.
Acute aquatic toxicity	C3	

GHS Hazards

H226	Flammable liquid and vapour
H304	May be fatal if swallowed and enters airways
H312	Harmful in contact with skin
H315	Causes skin irritation
H318	Causes serious eye damage
H332	Harmful if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H351	Suspected of causing cancer
H360	May damage fertility or the unborn child

GHS Precautions

P201	Obtain special instructions before use
P202	Do not handle until all safety precautions have been read and understood
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/light/.../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
P271	Use only outdoors or in a well-ventilated area
P280	Wear protective gloves/protective clothing/eye protection/face protection
P281	Use personal protective equipment as required
P310	Immediately call a POISON CENTER or doctor/physician
P312	Call a POISON CENTER or doctor/physician if you feel unwell
P321	Specific treatment (see ... on this label)
P322	Specific measures (see ... on this label)
P331	Do NOT induce vomiting
P362	Take off contaminated clothing and wash before reuse
P363	Wash contaminated clothing before reuse
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P302+P352	IF ON SKIN: Wash with soap and water
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 continuously 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
P332+P313	If skin irritation occurs: Get medical advice/attention
P370+P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction
P405	Store locked up
P403+P233	Store in a well ventilated place. Keep container tightly closed
P403+P235	Store in a well ventilated place. Keep cool
P501	Dispose of contents/container to an approved waste disposal plant

Signal Word: Danger



Section 3 - Composition/Information on Ingredients

Chemical Name	CAS number	Weight Concentration %
Methyl Isobutyl Ketone	108-10-1	10.00% - 20.00%
n-Butyl Acetate	123-86-4	5.00% - 10.00%
Propylene Glycol Methyl Ether Acetate	108-65-6	5.00% - 10.00%
n-Butanol	71-36-3	1.00% - 5.00%
Cyclohexanone	108-94-1	1.00% - 5.00%
Xylene (mixed isomers)	1330-20-7	1.00% - 5.00%
Ethylbenzene	100-41-4	0.10% - 1.00%
Toluene	108-88-3	0.10% - 1.00%

Section 4 - First Aid Measures

INHALATION - Remove from area to fresh air. If symptomatic, contact a poison control center, emergency room, or physician as further medical treatment may be necessary. Administer oxygen if a qualified operator is available.

EYE CONTACT - In case of eye contact, flush the eyes with water for fifteen (15) minutes. If contact lenses are worn, quickly remove them, then flush the eyes with water. If irritation persists, contact a poison control center, emergency room, or physician as further medical treatment may be necessary.

SKIN CONTACT - In case of skin contact, remove contaminated clothing. Flush the skin with large amounts of water, then wash the skin with soap and water. If symptoms persist, contact a poison control center, emergency room, or physician as further medical treatment may be necessary.

INGESTION - If material is ingested, seek immediate medical attention. Do not induce vomiting. If vomiting occurs spontaneously, keep the head below the hips to prevent aspiration of liquid into the lungs. Contact a poison control center, emergency room, or physician as further medical treatment will be necessary.

Section 5 - Fire Fighting Measures

Flash Point: 35 °C (95 °F)

LEL: 1.00

UEL: 12.00

EXTINGUISHING MEDIA: Use carbon dioxide (CO₂), "alcohol" foam, dry chemical

UNUSUAL FIRE OR EXPLOSION HAZARDS: The product vapor is heavier than air and may travel a considerable distance to a source of ignition and flashback. Closed containers may explode or burst when exposed to extreme heat. May produce hazardous decomposition products when exposed to extreme heat.

HAZARDOUS COMBUSTION PRODUCTS: See section 10 for a list of hazardous decomposition products for this mixture.

FIRE FIGHTING: Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat. If evacuation of personnel is necessary, evacuate to an upwind area. Decontaminate personnel and equipment with a water wash-down after fire and smoke exposure.

FIRE FIGHTING EQUIPMENT: Firemen and emergency responders: wear full turnout gear or Level A equipment, including positive-pressure, self-contained breathing apparatus (SCBA).

Section 6 - Accidental Release Measures

SPILL AND LEAK PROCEDURES: Spill supervisor - Ensure cleanup personnel wear all appropriate Personal Protective Equipment (PPE), including respiratory protection. Remove all ignition sources. Keep nonessential personnel away from the contaminated area.

SMALL SPILLS: Ventilate the contaminated area. Using nonsparking tools, mix the appropriate sorbent into the spilled material. Use an absorbent like sawdust for aqueous, waterborne, and solvent-borne coatings.

Collect the saturated sorbent and transfer it into a covered container. Steel containers are acceptable for all wastes

except wastes which contain acid. Use suitable plastic containers for acid-bearing wastes.

Dispose of the waste in compliance with all Federal, state, regional, and local regulations.

LARGE SPILLS: Prevent this material from entering sewers and watercourses by diking or impounding the spilled material. Advise authorities if the product has entered or may enter, sewers, watercourses, or extensive land areas .

Ventilate the contaminated area. Using nonsparking tools, mix the appropriate sorbent into the spilled material. Use an absorbent like sawdust for aqueous, waterborne, and solvent-borne coatings.

Collect the saturated sorbent and transfer it into a covered container. Steel containers are acceptable for all wastes except wastes which contain acid. Use suitable plastic containers for acid-bearing wastes.

Label the waste container. Dispose of the waste in compliance with all Federal, state, regional, and local regulations.

Section 7 - Handling and Storage

HANDLING PRECAUTIONS: Wear all appropriate Personal Protective Equipment (PPE). Wear respiratory protection or ensure adequate ventilation at all times as vapors can accumulate in confined or poorly ventilated areas. Use the product in a manner which minimizes splashes and/or the creation of dust. Keep containers closed when not in use. Do not handle or store material near heat, sparks, open flames, or other sources of ignition. Store at room temperatures, i.e., 50 to 85 °F (10 to 30 °C).

STORAGE: Prevent from freezing. Do not store above 95 °F (35 °C).

Store only in original containers.

Section 8 - Exposure Controls / Personal Protection

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Methyl Isobutyl Ketone 108-10-1	TWA 100 ppm (Z-1) TWA 50 ppm (P0) STEL 75 ppm (P0)	TLV 20 ppm - TWA TLV 75 ppm - STEL	Not Established
n-Butyl Acetate 123-86-4	OSHA Z-1 150 ppm - TWA OSHA P0 150 ppm - TWA OSHA P0 200 ppm - STEL	TLV 150 ppm - TWA TLV 200 ppm - STEL	Not Established
Propylene Glycol Methyl Ether Acetate 108-65-6	PEL N/A	TLV N/A	Not Established
n-Butanol 71-36-3	PEL 100 ppm - TWA VPEL 50 ppm - Ceiling (Skin)	TLV 20 ppm - TWA	Not Established
Cyclohexanone 108-94-1	PEL 50 ppm - TWA VPEL 25 ppm - TWA (Skin)	TLV 20 ppm - TWA (Skin) TLV 50 ppm - STEL (Skin)	Not Established
Xylene (mixed isomers) 1330-20-7	PEL 100 ppm - TWA PEL 150 ppm - STEL	TLV 100 ppm - TWA TLV 150 ppm - STEL	Not Established
Ethylbenzene 100-41-4	STEL - 125 ppm (Z-1) TWA - 100 ppm (Z-1)	STEL - 125 ppm TLV TWA - 20 ppm TLV	Not Established

Toluene 108-88-3	100 ppm - TWA (Z-1) 150 ppm - STEL (Z-1) 200 ppm TWA (Z-2)	TLV 20 ppm - TWA	Not Established
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ENGINEERING: Provide general dilution of local exhaust ventilation in volume and pattern to keep concentration of ingredients listed in Section 2 below the lowest suggested exposure limits, the LEL below the stated limit, and to remove decomposition products during welding or flame cutting.

This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m³ (total dust), 3 mg/m³ (respirable fraction), OSHA PEL 15 mg/m³ (total dust), 5 mg/m³ (respirable fraction).

Ensure processing (curing) ovens are properly vented to prevent the introduction of processing fumes into the workplace. Use explosion-proof equipment and good manufacturing practice.

VENTILATION: Use only with adequate ventilation, i.e., ventilation in compliance with occupational exposure limits. Refer to OSHA standards 1910.94, 1910.107, 1910.108.

PERSONAL PROTECTIVE EQUIPMENT

EYES:

Wear splash goggles. If extra protection is required, wear a face shield over the splash goggles. Face shields are effective only if worn in addition to splash goggles.

PROTECTIVE GLOVES:

Wear chemical-resistant gloves (butyl rubber or neoprene). Protective gloves should be inspected frequently and discarded when they exhibit cuts, tears, pinholes, or signs of excessive wear. If necessary, wear a chemical-resistant, butyl-rubber apron and other protective clothing, as deemed appropriate, to avoid skin contact with material.

RESPIRATORY PROTECTION:

Respiratory protection may not be needed if the local exhaust is sufficient to maintain levels of hazardous ingredients below occupational exposure limits. Where ventilation is inadequate, use a NIOSH/MSHA-approved, air-purifying respirator equipped with the appropriate chemical cartridges or positive-pressure, air-supplied respirator. Read the respirator manufacturer's instructions and literature carefully to determine the type of airborne contaminants against which the respirator is effective, its limitations, and how it is to be properly fitted and used.

CONTAMINATED EQUIPMENT: Dispose of the waste in compliance with all Federal, state, regional, and local regulations.

Section 9 - Physical and Chemical Properties

This mixture typically exhibits the following properties under normal circumstances:

Appearance Gray Liquid Physical State Liquid Vapor Pressure 4.7 mm Hg @ 25C Boiling Range 116 to 156 °C Lbs VOC/Gallon Solids 10.4	Odor Solvent odor Vapor Density Heavier than air Evaporation Rate Slower than ether Specific Gravity (SG) 1.229 Lbs VOC/Gallon Less Water and Exempt Solvent 4.38
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Section 10 - Stability and Reactivity

Stability:

STABLE

Components of this mixture are incompatible with the following materials:

Strong oxidizing agents

Alkali metals, Aluminum, Halogens, Lead, Strong mineral acids, Strong oxidizing agents

Strong oxidizing agents, strong acids, strong bases

Amines, copper, copper alloys, strong alkalis, strong mineral acids, strong oxidizing agents, strong reducing agents

This mixture is likely to exhibit the following combustion products:

Carbon Dioxide, Carbon Monoxide

Hazardous polymerization will not occur.

Section 11 - Toxicological Information

Component Toxicity

Toxicological information: The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and classified for toxicological hazards accordingly. See Sections 3 and 15 for details.

Routes of Entry:

Inhalation

Skin Contact

Eye Contact

Ingestion

Exposure to this material may affect the following organs:

Blood Eyes

Kidneys

Liver

Lungs

Central Nervous System

Reproductive System

Skin

Effects of Overexposure

100-41-4

Systemic Effects

Ethylbenzene

Chronic exposure to ethyl benzene causes fatigue, headache, and eye and upper respiratory tract irritation. Repeated contact with the skin may cause drying, defatting, and dermatitis.

Eye Contact

May cause mild irritation. Symptoms include stinging, tearing, and redness.

Ingestion

Aspiration hazard if swallowed. Can enter lungs and cause damage. May be fatal if swallowed. Possible pneumonia if vomited.

Inhalation

May cause respiratory tract irritation. May cause mucous membrane irritation. Can cause central nervous system (CNS) depression. Exposure at high concentrations may cause narcosis. Symptoms of narcosis include fatigue, drowsiness, staggering gait, and incoordination.

Skin Contact

Absorbed through skin. May cause skin irritation. Skin inflammation is characterized by itching, scaling, reddening or, occasionally, blistering.

108-10-1

Methyl Isobutyl Ketone

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: mouth and throat irritation (soreness, dry or scratchy feeling. Cough), stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness).

Eye Contact	May cause mild irritation. Symptoms include stinging, tearing, and redness.
Ingestion	Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.
Inhalation	Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits.
Skin Contact	May cause mild skin irritation. Prolonged or repeated contact may dry the skin. Symptoms include redness, burning, drying and cracking of skin, and skin burns. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use .

108-65-6

PM Acetate

Moderate health hazard. Moderate eye irritant. Mucous membrane irritant. Slight inhalation hazard. Slight ingestion hazard. Slight skin absorption hazard.

Eye Contact	May cause moderate irritation, including burning sensation, tearing, redness or swelling
Ingestion	Ingestion may cause gastrointestinal discomfort with any or all of the following symptoms: nausea, vomiting, lethargy, or diarrhea.
Inhalation	Prolonged overexposure to either vapor or mist may cause coughing, shortness of breath, dizziness and drunkenness.
Skin Contact	No significant signs or symptoms indicative of any health hazard are expected to occur as a result of skin contact. Possible systemic toxicity by skin absorption.

108-88-3

Toluene

Signs of symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: metallic taste, stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), central nervous system excitation (giddiness, liveliness, light-headed feeling) followed by central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness) and other central nervous system effects, temporary changes in mood and behavior, muscle weakness, loss of coordination, confusion, irregular heartbeat, coma, and death.

Eye Contact	May cause mild irritation. Symptoms include stinging, tearing, and redness.
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Ingestion	Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.
Inhalation	Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits.
Skin Contact	May cause mild skin irritation. Symptoms may include redness and burning of skin. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.

108-94-1

Cyclohexanone

Signs of symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: mouth and throat irritation (soreness, dry or scratchy feeling, cough), stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), respiratory depression (slowing of the breathing rate), respiratory failure.

Eye Contact	May cause mild irritation. Symptoms include stinging, tearing, and redness.
Inhalation	Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.
Inhalation	Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits.
Skin Contact	Can cause skin irritation. Prolonged or repeated contact may dry the skin. Symptoms include redness, burning, drying and cracking of skin, burns and other skin damage. Passage of this material into the body through the skin is possible, and may add to toxic effects from breathing or swallowing.

123-86-4

n-Butyl Acetate

Repeated skin exposure can produce local skin destruction or dermatitis. Repeated or prolonged exposure to the substance can produce lung damage. Repeated or prolonged contact with spray or mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to the substance can produce target organs damage.

Eye Contact	May cause mild irritation. Symptoms include stinging, tearing, and redness.
Ingestion	Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.

Inhalation	Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits.
Skin Contact	May cause mild skin irritation. Symptoms may include redness and burning of skin. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.

1330-20-7

Xylene (mixed)

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: redness of the face and neck, mouth and throat irritation (soreness, dry or scratchy feeling, cough), stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), tight feeling in the chest, central nervous system excitation (giddiness, liveliness, light-headed feeling) followed by central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness) and other central nervous system effects, effects on memory, respiratory depression (slowing of the breathing rate), shortness of breath, loss of coordination, confusion, irregular heartbeat, narcosis (dazed or sluggish feeling), coma.

Eye Contact	May cause mild irritation. Symptoms include stinging, tearing, and redness.
Ingestion	Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.
Inhalation	Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits.
Skin Contact	Can cause skin irritation. Prolonged and repeated contact may dry the skin. Symptoms may include redness, burning, and drying and cracking of the skin, burns and other skin damage. Additional symptoms of skin contact may include: skin blistering. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.

71-36-3

n-Butanol

Signs of symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), cough, central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), blurred vision.

Eye Contact	Can cause severe eye irritation. Symptoms include stinging tearing, and redness, and swelling of eyes. Can injure eye tissue.
Ingestion	Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.
Inhalation	Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits.

Skin Contact

Can cause skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, drying and cracking of skin, burns, and other skin damage.. Passage of this material into the body through the skin is possible, and may add to toxic effects from breathing or swallowing.

Carcinogenicity: The following chemicals comprise 0.1% or more of this mixture and are listed and/or classified as carcinogens or potential carcinogens by NTP, IARC, OSHA (mandatory listing), or ACGIH (optional listing). See Section 15 for carcinogenicity assessment.

<u>CAS Number</u>	<u>Description</u>	<u>% Weight</u>	<u>Carcinogen Rating</u>
108-88-3	Toluene	1% - 1.0%	
100-41-4	Ethylbenzene	1% - 1.0%	IARC (2B) ACGIH (A3)
108-10-1	Methyl Isobutyl Ketone	0% - 20%	IARC (2B)

Section 12 - Ecological Information

Component Ecotoxicity

Methyl Isobutyl Ketone

Ecotoxicity

No data available

Persistence and Degradability

No data available

Bioaccumulative Potential

No data available

Mobility in Soil

No data available

Other Adverse Effects

Ozone Depletion Potential - 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).

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

n-Butyl Acetate

Ecotoxicity

Toxicity to fish - LC50 (Pimephales promelas (fathead minnow)): 18 mg/l;
Exposure time: 96 h; Test Type: flow-through test
Toxicity to daphnia and other aquatic invertebrates - EC50 (Daphnia magna (Water flea)): 44 mg/l; Exposure time: 48 h; Test Type: static test
Acute aquatic toxicity (Assessment) - Harmful to aquatic life.
Chronic aquatic toxicity (Assessment) - This product has no known ecotoxicological effects

Persistence and Degradability

No data available

Bioaccumulative Potential

No data available

Mobility in Soil

No data available

Other Adverse Effects

Ozone Depletion Potential - Regulation: 40 CFR Protection of Environment; Part 82 Pro-tection 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).

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Harmful to aquatic life.

Propylene Glycol Methyl Ether
Acetate

Ecotoxicity

No data available

Persistence and Degradability

No data available

Bioaccumulative Potential

No data available

Mobility in Soil

No data available

Other Adverse Effects

Ozone Depletion Potential - Regulation: 40 CFR Protection of Environment; Part 82 Pro-tection 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).

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

n-Butanol

Ecotoxicity
No data available

Persistence and Degradability
No data available

Bioaccumulative Potential
No data available

Mobility in Soil
No data available

Other Adverse Effects
Ozone Depletion Potential - 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).

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Cyclohexanone

Ecotoxicity
No data available

Persistence and Degradability
Biodegradability - Biodegradation: > 60 % Remarks: Readily biodegradable

Bioaccumulative Potential
No data available

Mobility in Soil
No data available

Other Adverse Effects
Ozone Depletion Potential - 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).

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Xylene (mixed isomers)

Ecotoxicity
No data available

Persistence and Degradability
No data available

Bioaccumulative Potential
No data available

Mobility in Soil
No data available

Other Adverse Effects
Ozone Depletion Potential - Regulation: 40 CFR Protection of Environment; Part 82 Pro-tection 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).

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Ethylbenzene

Ecotoxicity
Toxicity to fish - LC50 Oncorhynchus mykiss (rainbow trout): 4.2 mg/l; Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates - EC50 Daphnia magna (Water flea): 1.8 - 2.4 mg/l; Exposure time: 48 h; Test type: static test
Toxicity to algae - EC50 Skeletonema costatum (marine diatom): 4.9 mg/l - Exposure time: 72 h; Test type: static test

Persistence and Degradability
Biodegradability aerobic - Exposure time 28 d Result: 70 - 80 % - Readily biodegradable.

Bioaccumulative Potential
Due to the distribution coefficient n-octanol/water, accumulation in organisms is not expected.

Mobility in Soil
No data available

Other Adverse Effects
Ozone Depletion Potential - Regulation: 40 CFR Protection of Environment; Part 82 Pro-tection 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).

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Harmful to aquatic life with long lasting effects.

Toluene

Ecotoxicity

Toxicity to fish - LC50; (Oncorhynchus mykiss (rainbow trout)): 5.5 mg/l;
Exposure time: 96 h; Test Type: flow-through test
Toxicity to daphnia and other aquatic invertebrates - LC50 (Ceriodaphnia dubia):
3.78 mg/l; Exposure time: 48 h; Test Type: Renewal
Toxicity to daphnia and other aquatic invertebrates (Chronic Toxicity)- NOEC:
0.74 mg/l; Exposure time: 7 d
Acute aquatic toxicity (Assessment) - Toxic to aquatic life.
Chronic aquatic toxicity (Assessment) - Harmful to aquatic life with long lasting effects.

Persistence and Degradability

No data available

Bioaccumulative Potential

Partition coefficient: n-octanol/water - log Pow: 2.73 (20 °C); pH: 7

Mobility in Soil

No data available

Other Adverse Effects

Ozone Depletion Potential - Regulation: 40 CFR Protection of Environment; Part 82 Pro-tection 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).

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Section 13 - Disposal Considerations

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. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14 - Transport Information

This material is classified for transport as follows:

<u>Agency</u>	<u>Proper Shipping Name</u>	<u>UN Number</u>	<u>Packing Group</u>	<u>Hazard Class</u>
DOT	Paint	1263	III	3

Section 15 - Regulatory Information

According to the Reg. (EC) No 1272/2008, relating of the classification packaging and labelling of dangerous

substances and preparations, the product is labelled as follows:

State of California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): WARNING!

This product contains the following chemicals which are listed by the State of California as carcinogenic or a reproductive toxin:

Toluene 108-88-3 0.1 - 1.0%
Ethylbenzene 100-41-4 0.1 - 1.0%
Methyl Isobutyl Ketone 108-10-1 10 - 20%

Carcinogenicity:

IARC: Group 2B: Possibly carcinogenic to humans

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.

Ethylbenzene 100-41-4 0.1 - 1.0%
Methyl Isobutyl Ketone 108-10-1 10 - 20%

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.

Toluene 108-88-3 0.1 - 1.0%
Xylene (mixed isomers) 1330-20-7 1 - 5%
Cyclohexanone 108-94-1 1 - 5%
n-Butanol 71-36-3 1 - 5%
Propylene Glycol Methyl Ether Acetate 108-65-6 5 - 10%
n-Butyl Acetate 123-86-4 5 - 10%

Commonwealth du Massachusetts "Droit de savoir": Ce produit contient les substances toxiques ou dangereuses suivantes, qui figurent sur la liste des substances du Massachusetts:

Ethylbenzene 100-41-4 0.1 - 1.0%
Xylene (mixed isomers) 1330-20-7 1 - 5%

Liste du droit de savoir des substances dangereuses des travailleurs du New Jersey et de la

communauté: Les substances suivantes figurent sur la liste du droit de savoir des substances dangereuses du New Jersey:

Ethylbenzene 100-41-4 0.1 - 1.0%
Xylene (mixed isomers) 1330-20-7 1 - 5%

Loi sur le droit de savoir des travailleurs et des communautés du Pennsylvanie: Ce produit contient les produits chimiques suivants qui figurent sur la liste des substances dangereuses de Pennsylvanie:

Ethylbenzene 100-41-4 0.1 - 1.0%
Xylene (mixed isomers) 1330-20-7 1 - 5%

Toxic Substances Control Act (TSCA): All chemicals except those listed below appear in the Toxic Substances Control Act Chemical Substance Inventory:

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.

108-88-3	Toluene	0.1 - 1.0%
71-36-3	n-Butanol	1.0 - 5%
108-94-1	Cyclohexanone	1.0 - 5%
100-41-4	Ethylbenzene	0.1 - 1.0%
108-10-1	Methyl Isobutyl Ketone	10 - 20%
1330-20-7	Xylene (mixed isomers)	1.0 - 5%

Section 16 - Other Information

Hazardous Material Information System (HMIS)

HEALTH	2
FLAMMABILITY	3
PHYSICAL HAZARD	0
PERSONAL PROTECTION	B

HMIS & NFPA Hazard Rating

Legend

* = Chronic Health Hazard

0 = INSIGNIFICANT

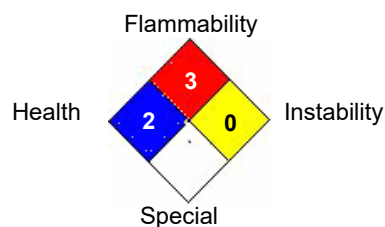
1 = SLIGHT

2 = MODERATE

3 = HIGH

4 = EXTREME

National Fire Protection Association (NFPA)



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Reviewer Revision

Date Prepared: 4/8/2024