

MaxPox® Resin

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	• MaxPox® Resin
Trade Name	• MaxPox® Resin
Company	• Maxliner, 450 College Drive, Martinsville, VA 24112 USA
Company Contact	• info@maxlinerusa.com
Company Phone	• 1-877-426-5948
Emergency	• 24-Hour Emergency Contact: (Infotrac) 1-800-535-5053 • Local Emergency Contact: 1-800-535-5053

2. HAZARDS IDENTIFICATION

Hazard classification	• This material is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200. <i>Acute toxicity</i> • Category 2 <i>Eye irritation</i> • Category 2B <i>Skin sensitization</i> • Category 1
<i>Label elements</i>	 <i>Pictogram</i>
<i>Signal word</i>	• Warning
Hazards	• Causes skin and eye irritation. • May cause an allergic skin reaction.
Precautionary statements	
<i>Prevention</i>	• Avoid breathing dust/fume/gas/mist/vapors/spray. • Wash skin thoroughly after handling. • Contaminated work clothing should not be allowed out of the workplace. • Wear protective gloves.
<i>Response</i>	• IF ON SKIN: Wash with plenty of soap and water. • IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. • 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.
<i>Disposal</i>	• Dispose of contents/ container to an approved waste disposal plant.

3. COMPOSITION / INFORMATION ON INGREDIENTS

This product is a mixture.

Component	CASRN	Concentration
<i>Propane, 2,2-bis[p-(2,3-epoxypropoxy)phenyl]-, polymers</i>	25085-99-8	60.0 – 70.0%
<i>Reaction product: Bisphenol F- (epichlorohydrin); epoxy resin</i>	9003-36-5	10.0 – 20.0%
<i>Alkyl(C12-14) glycidyl ether</i>	68609-97-2	10.0 – 20.0%
<i>Silica</i>	7631-86-9	<3.0%
<i>Naphtha (petroleum), heavy alkylate</i>	64741-65-7	<0.8%

Note: Liquid Epoxy Resins (LERs) are made by reacting bisphenol A and epichlorohydrin. Olin uses both CAS No. 25085-99-8 and 25068-38-6 for its LERs. Other manufacturers use CAS No. 25068-38-6 for their LERs. Accordingly, LER manufacturers consider that derivatives of LERs may be described using either CAS number as a starting material.

4. FIRST AID MEASURES

Description of first aid measures

<i>General advice</i>	First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment.
<i>Inhalation</i>	Move person to fresh air; if effects occur, consult a physician.
<i>Skin contact</i>	Remove material from skin immediately by washing with soap and plenty of water. Remove contaminated clothing and shoes while washing. Seek medical attention if irritation persists. Wash clothing before reuse. Discard items which cannot be decontaminated, including leather articles such as shoes, belts and watchbands. Suitable emergency safety shower facility should be available in work area.
<i>Eye contact</i>	Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist. Suitable emergency eye wash facility should be available in work area
<i>Ingestion</i>	No emergency medical treatment necessary.
<i>Most important symptoms and effects, both acute and delayed</i>	Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.
<i>Indication of any immediate medical attention and special treatment needed</i> <i>Notes to physician</i>	If burn is present, treat as any thermal burn, after decontamination. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5. FIRE FIGHTING MEASURES

<i>Suitable extinguishing media</i>	Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective. Water fog, applied gently may be used as a blanket for fire extinguishment.
<i>Unsuitable extinguishing media</i>	Do not use direct water stream. May spread fire.
<i>Special hazards arising from the substance or mixture: Hazardous combustion products</i>	During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Phenolics, Carbon monoxide, Carbon dioxide.
<i>Unusual Fire and Explosion Hazards</i>	Container may rupture from gas generation in a fire situation. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids. Dense smoke is emitted when burned without sufficient oxygen.
<i>Advice for firefighters</i>	Fire Fighting Procedures: Keep people away. Isolate fire and deny unnecessary entry. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of reignition has passed. Fight fire from protected location or safe distance. Consider the use of unmanned hose holders or monitor nozzles. Immediately withdraw all personnel from the area in case of rising sound from venting safety device or discoloration of the container. Do not use direct water stream. May spread fire. Move container from fire area if this is possible without hazard. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage. Water fog, applied gently may be used as a blanket for fire extinguishment. Contain fire water run-off if possible. Fire water run-off, if not contained, may cause environmental damage. Review the "Accidental Release Measures" and the "Ecological Information" sections of this SDS.
<i>Special protective equipment for firefighters</i>	Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). Avoid contact with this material during fire fighting operations. If contact is likely, change to full chemical resistant fire fighting clothing with self-contained breathing apparatus. If this is not available, wear full chemical resistant clothing with self-contained breathing apparatus and fight fire from a remote location. For protective equipment in post-fire or non-fire clean-up situations, refer to the relevant sections.

6. ACCIDENTAL RELEASE MEASURES

<i>Personal precautions, protective equipment and emergency procedures</i>	- Isolate area. Keep unnecessary and unprotected personnel from entering the area. Refer to section 7, Handling, for additional precautionary measures. - Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.
<i>Environmental precautions</i>	Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.
<i>Methods and materials for containment and cleaning up</i>	Contain spilled material if possible. Absorb with materials such as: Sand. Collect in suitable and properly labeled containers. See Section 13, Disposal Considerations, for additional information.

7. HANDLING AND STORAGE

<i>Precautions for safe handling</i>	Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated contact with skin. Wash thoroughly after handling. Spills of these organic materials on hot fibrous insulations may lead to lowering of the autoignition temperatures possibly resulting in spontaneous combustion. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION.	
<i>Conditions for safe storage</i>	Store in a cool, dry place.	
Storage stability	Storage temperature	Shelf life
	10 - 35°C (50-95°F)	Use within 24 month

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Exposure limits are listed below, if they exist.

Component	Regulation	Type of Listing	Value/Notation
<i>Silica</i>	OSHA Z-3	TWA Dust	20 Million particles per cubic foot, Silica
	OSHA Z-3	TWA Dust	80 mg/m ³ / %SiO ₂ , Silica
<i>Naphtha (petroleum), heavy alkylate</i>	OSHA Z-1	TWA	2000 mg/m ³ 500ppm
	OSHA P0	TWA	1600 mg/m ³ 400ppm

Exposure controls*Engineering controls*

- Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.

Individual protection measures**Eye/face protection**

- Use safety glasses (with side shields). If exposure causes eye discomfort, use a fullface respirator.

Skin protection*Hand protection*

- Use gloves chemically resistant to this material. Examples of preferred glove barrier materials include: Butyl rubber. Ethyl vinyl alcohol laminate ("EVAL"). Nitrile/butadiene rubber ("nitrile" or "NBR"). Neoprene. Polyvinyl chloride ("PVC" or "vinyl"). NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

Other protection

- Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task.

Respiratory protection

- Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. For most conditions no respiratory protection should be needed; however, if discomfort is experienced, use an approved airpurifying respirator.
- The following should be effective types of air-purifying respirators:
Organic vapor cartridge.

9. PHYSICAL & CHEMICAL PROPERTIES

<i>Physical state</i>	• Liquid
<i>Color</i>	• Yellow
<i>Odor</i>	• Characteristic
<i>Odor Threshold</i>	• No test data available
<i>pH</i>	• Not applicable
<i>Melting point/range</i>	• Not applicable
<i>Freezing point</i>	• No test data available
<i>Boiling range (760 mmHg)</i>	• >204°C (>399°F) <i>Literature</i> (based on major component)
<i>Flash Point</i>	• >110°C (>230°F) <i>Unspecified</i> (based on major component)e
<i>Evaporation Rate</i> (Butyl Acetate=1)	• No test data available
<i>Flammability (solid, gas)</i>	• Not applicable
<i>Lower explosion limit</i>	• No test data available
<i>Upper explosion limit</i>	• No test data available
<i>Vapor pressure</i>	• <0.01 mbar at 20°C (68°F) <i>Literature</i> (based on major component)
<i>Relative Vapor Density (air=1)</i>	• No test data available
<i>Relative Density (water=1)</i>	• 1.17 <i>Calculated</i>
<i>Water solubility</i>	• Negligible
<i>Partition coefficient:</i> <i>noctanol/water</i>	• This product is a mixture. See Section 12 for individual component data.
<i>Auto-ignition temperature</i>	• No test data available
<i>Decomposition temperature</i>	• No test data available
<i>Dynamic Viscosity</i>	• 1,500 cP at 25°C (77°F) <i>ASTM D 445</i>
<i>Kinematic Viscosity</i>	• No test data available
<i>Explosive properties</i>	• No
<i>Oxidizing properties</i>	• No
<i>Softening point</i>	• No data available
<i>Molecular weight</i>	• No test data available
<i>Pour point</i>	• No data available

NOTE: The physical data presented above are typical values and should not be construed as a specification.

10. CHEMICAL STABILITY & REACTIVITY INFORMATION

<i>Reactivity</i>	No data available.
<i>Chemical stability</i>	Stable under recommended storage conditions. See Storage, Section 7.
<i>Possibility of hazardous reactions</i>	Will not occur by itself. Masses of more than one pound (0.5 kg) of product plus an aliphatic amine will cause irreversible polymerization with considerable heat build-up.
<i>Conditions to avoid</i>	- Avoid short term exposures to temperatures above 300°C - Potentially violent decomposition can occur above 35 °C - Avoid prolonged exposure to temperatures above 250°C - Generation of gas during decomposition can cause pressure in closed systems. Pressure build-up can be rapid.
<i>Incompatible materials</i>	- Avoid contact with oxidizing materials. Avoid contact with: Acids and Bases. - Avoid unintended contact with amines.
<i>Hazardous decomposition products</i>	Decomposition products depend upon temperature, air supply and the presence of other materials. Gases are released during decomposition. Uncontrolled exothermic reaction of epoxy resins release phenolics, carbon monoxide, and water.

11. TOXICOLOGICAL INFORMATION

Toxicological information appears in this section when such data is available.

Acute toxicity

<i>Acute oral toxicity</i>	- Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts. - As product: Single dose oral LD50 has not been determined. - Based on information for component(s): LD50, Rat, > 5,000 mg/kg Estimated.
<i>Acute dermal toxicity</i>	- Prolonged skin contact is unlikely to result in absorption of harmful amounts. - As product: The dermal LD50 has not been determined. - Based on information for component(s): LD50, Rabbit, > 5,000 mg/kg Estimated.
<i>Acute inhalation toxicity</i>	- Excessive exposure may cause irritation to upper respiratory tract (nose and throat). - As product: The LC50 has not been determined.
<i>Skin corrosion/irritation</i>	- Brief contact may cause moderate skin irritation with local redness. - Repeated contact may cause skin burns. Symptoms may include pain, severe local redness, swelling, and tissue damage.
<i>Serious eye damage/eye irritation</i>	- May cause eye irritation. - Corneal injury is unlikely. - Vapor may cause eye irritation experienced as mild discomfort and redness.
<i>Sensitization</i>	- For skin sensitization: - A component in this mixture has caused allergic skin reactions in humans. - Contains component(s) which have caused allergic skin sensitization in guinea pigs. - For respiratory sensitization: No relevant data found.
<i>Specific Target Organ Systemic Toxicity (Single Exposure)</i>	Evaluation of available data suggests that this material is not an STOT-SE toxicant.

11. TOXICOLOGICAL INFORMATION (CONTINUED)

<i>Specific Target Organ Systemic Toxicity (Repeated Exposure)</i>	Except for skin sensitization, repeated exposures to low molecular weight epoxy resins of this type are not anticipated to cause any significant adverse effects.
<i>Carcinogenicity</i>	Many studies have been conducted to assess the potential carcinogenicity of diglycidyl ether of bisphenol A (DGEBA). Indeed, the most recent review of the available data by the International Agency for Research on Cancer (IARC) has concluded that DGEBA is not classified as a carcinogen. Although some weak evidence of carcinogenicity has been reported in animals, when all of the data are considered, the weight of evidence does not show that DGEBA is carcinogenic. Animal testing and human experience demonstrate no significant risk of human cancer from exposure to relatively pure amorphous silica.
<i>Teratogenicity</i>	Resins based on the diglycidyl ether of bisphenol A (DGEBA) did not cause birth defects or other adverse effects on the fetus when pregnant rabbits were exposed by skin contact, the most likely route of exposure, or when pregnant rats or rabbits were exposed orally. Contains component(s) which did not cause birth defects or any other fetal effects in lab animals.
<i>Reproductive toxicity</i>	Contains component(s) which did not interfere with reproduction in animal studies.
<i>Mutagenicity</i>	Contains component(s) which were positive in in vitro genetic toxicity studies. Genetic toxicity studies in animals were negative for component(s) tested.
<i>Aspiration Hazard</i>	Based on physical properties, not likely to be an aspiration hazard.
Components Influences Toxicology	
<i>Propane, 2,2-bis[p-(2,3-epoxypropoxy)phenyl]-, polymers</i>	Acute inhalation toxicity: The LC50 has not been determined.
<i>Reaction product: Bisphenol F-(epichlorohydrin); epoxy resin</i>	Acute inhalation toxicity: The LC50 has not been determined.
<i>Alkyl(C12-14) glycidyl ether</i>	Acute inhalation toxicity: Excessive exposure may cause irritation to upper respiratory tract (nose and throat). For narcotic effects: No relevant data found. LC50, Rat, 4 Hour, dust/mist, 0.206 mg/l No deaths occurred following exposure to a saturated atmosphere.
<i>Silica</i>	Acute inhalation toxicity: Maximum attainable concentration. LC50, Rat, 4 Hour, Dust, > 2.08 mg/l OECD Test Guideline 403 No deaths occurred at this concentration.
<i>Naphtha (petroleum), heavy alkylate</i>	Acute inhalation toxicity: The LC50 has not been determined.

12. ECOLOGICAL INFORMATION

Ecotoxicological information appears in this section when such data is available.

Toxicity

<i>Propane, 2,2-bis [p-(2,3-epoxypropoxy) phenyl]-, polymers</i>	- Acute toxicity to fish: Material is moderately toxic to aquatic organisms on an acute basis (LC50/EC50 between 1 and 10 mg/L in the most sensitive species tested). LC50, Oncorhynchus mykiss (rainbow trout), semi-static test, 96 Hour, 2 mg/l - Acute toxicity to aquatic invertebrates: EC50, Daphnia magna (Water flea), static test, 48 Hour, 1.8 mg/l - Acute toxicity to algae/aquatic plants: ErC50, Scenedesmus capricornutum (fresh water algae), static test, 72 Hour, Growth rate inhibition, 11 mg/l - Toxicity to bacteria: IC50, Bacteria, 18 Hour, Respiration rates., > 42.6 mg/l - Chronic toxicity to aquatic invertebrates: NOEC, Daphnia magna (Water flea), semi-static test, 21 d, number of offspring, 0.3 mg/l MATC (Maximum Acceptable Toxicant Level), Daphnia magna (Water flea), semi-static test, 21 d, number of offspring, 0.55 mg/l
<i>Reaction product: Bisphenol F-(epichlorohydrin); epoxy resin</i>	- Acute toxicity to fish: Material is moderately toxic to aquatic organisms on an acute basis (LC50/EC50 between 1 and 10 mg/L in the most sensitive species tested). LC50, Freshwater fish, 96 Hour, 2.54 mg/l - Acute toxicity to aquatic invertebrates: EC50, Daphnia magna, Static, 48 Hour, > 1,000 mg/l, OECD Test Guideline 202 or Equivalent - Acute toxicity to algae/aquatic plants: EC50, Selenastrum capricornutum (green algae), Static, 72 Hour, > 1.8 mg/l, OECD Test Guideline 201 - Toxicity to bacteria: Activated sludge, Static, 3 Hour, Other, > 100 mg/l - Chronic toxicity to aquatic invertebrates: NOEC, Daphnia magna, semi-static test, 21 d, number of offspring, 0.3 mg/l
<i>Alkyl(C12-14) glycidyl ether</i>	- Acute toxicity to fish: Not expected to be acutely toxic, but material in pellet or bead form may mechanically cause adverse effects if ingested by waterfowl or aquatic life. LC50, Oncorhynchus mykiss (rainbow trout), static test, 96 Hour, >5,000 mg/l LC50, Lepomis macrochirus (Bluegill sunfish), static test, 96 Hour, 1,800 mg/l, Other guidelines - Acute toxicity to algae/aquatic plants: EbC50, Pseudokirchneriella subcapitata (green algae), 72 Hour, Growth inhibition (cell density reduction), 843 mg/l NOEC, Pseudokirchneriella subcapitata (green algae), 72 Hour, Growth inhibition (cell density reduction), 500 mg/l - Toxicity to bacteria: EC50, activated sludge, static test, 3 Hour, Respiration rates, > 100 mg/l

12. ECOLOGICAL INFORMATION (CONTINUED)

<i>Silica</i>	- Acute toxicity to fish: Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested). LC50, Danio rerio (zebra fish), 96 Hour, 5,000 - 10,000 mg/l - Acute toxicity to aquatic invertebrates: EC50, Daphnia magna (Water flea), 24 Hour, > 10,000 mg/l - Acute toxicity to algae/aquatic plants: EC50, Pseudokirchneriella subcapitata (green algae), 72 Hour, Biomass, 440 mg/l								
<i>Naphtha (petroleum), heavy alkylate</i>	- Acute toxicity to fish: Material is slightly toxic to aquatic organisms on an acute basis (LC50/EC50 between 10 and 100 mg/L in the most sensitive species tested). - Acute toxicity to algae/aquatic plants: EC50, Pseudokirchneriella subcapitata (green algae), 72 Hour, Biomass, 13 mg/l, OECD Test Guideline 201 or Equivalent								
Persistence and degradability									
<i>Propane, 2,2-bis[p-(2,3-epoxy-propoxy)phenyl]-, polymers</i>	- Biodegradability: Based on stringent OECD test guidelines, this material cannot be considered as readily biodegradable; however, these results do not necessarily mean that the material is not biodegradable under environmental conditions. 10-day Window: Not applicable <table><tr><td><i>Biodegradation</i></td><td> 12 % </td></tr><tr><td><i>Exposure time</i></td><td> 28 d </td></tr><tr><td><i>Method</i></td><td> - OECD Test Guideline 302B or Equivalent </td></tr><tr><td><i>Theoretical Oxygen Demand</i></td><td> 2.35 mg/mg Estimated </td></tr></table>	<i>Biodegradation</i>	12 %	<i>Exposure time</i>	28 d	<i>Method</i>	OECD Test Guideline 302B or Equivalent	<i>Theoretical Oxygen Demand</i>	2.35 mg/mg Estimated
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<i>Photodegradation</i>	<table><tr><td><i>Test Type</i></td><td> - Half-life (indirect photolysis) </td></tr><tr><td><i>Sensitizer</i></td><td> - OH radicals </td></tr><tr><td><i>Atmospheric half-life</i></td><td> 1.92 Hour </td></tr><tr><td><i>Method</i></td><td> - Estimated </td></tr></table>	<i>Test Type</i>	Half-life (indirect photolysis)	<i>Sensitizer</i>	OH radicals	<i>Atmospheric half-life</i>	1.92 Hour	<i>Method</i>	Estimated
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<i>Sensitizer</i>	OH radicals								
<i>Atmospheric half-life</i>	1.92 Hour								
<i>Method</i>	Estimated								
<i>Reaction product: Bisphenol F-(epichlorohydrin); epoxy resin</i>	- Biodegradability: Material is not readily biodegradable according to OECD/EEC guidelines <table><tr><td><i>Biodegradation</i></td><td> 0 % </td></tr><tr><td><i>Exposure time</i></td><td> 28 d </td></tr></table>	<i>Biodegradation</i>	0 %	<i>Exposure time</i>	28 d				
<i>Biodegradation</i>	0 %								
<i>Exposure time</i>	28 d								
<i>Alkyl(C12-14) glycidyl ether</i>	- Biodegradability: Biodegradation under aerobic static laboratory conditions is moderate (BOD20 or BOD28/ThOD between 10 and 40%). 10-day Window: Pass <table><tr><td><i>Biodegradation</i></td><td> 87 % </td></tr><tr><td><i>Exposure time</i></td><td> 28 d </td></tr><tr><td><i>Method</i></td><td> - OECD Test Guideline 301F or Equivalent </td></tr><tr><td><i>Chemical Oxygen Demand</i></td><td> 2.09 mg/mg </td></tr></table>	<i>Biodegradation</i>	87 %	<i>Exposure time</i>	28 d	<i>Method</i>	OECD Test Guideline 301F or Equivalent	<i>Chemical Oxygen Demand</i>	2.09 mg/mg
<i>Biodegradation</i>	87 %								
<i>Exposure time</i>	28 d								
<i>Method</i>	OECD Test Guideline 301F or Equivalent								
<i>Chemical Oxygen Demand</i>	2.09 mg/mg								

12. ECOLOGICAL INFORMATION (CONTINUED)

<i>Silica</i>	Biodegradability: Biodegradation is not applicable								
<i>Naphtha (petroleum), heavy alkylate</i>	- Biodegradability: Based on stringent OECD test guidelines, this material cannot be considered as readily biodegradable; however, these results do not necessarily mean that the material is not biodegradable under environmental conditions. 10-day Window: Fail								
	<table> <tr> <td><i>Biodegradation</i></td><td>• 8 - 22 %</td></tr> <tr> <td><i>Exposure time</i></td><td>• 28 d</td></tr> <tr> <td><i>Method</i></td><td>• OECD Test Guideline 301D or Equivalent</td></tr> <tr> <td><i>Theoretical Oxygen Demand</i></td><td>• 3.48 mg/mg</td></tr> </table>	<i>Biodegradation</i>	• 8 - 22 %	<i>Exposure time</i>	• 28 d	<i>Method</i>	• OECD Test Guideline 301D or Equivalent	<i>Theoretical Oxygen Demand</i>	• 3.48 mg/mg
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<i>Sensitizer</i>	• OH radicals								
<i>Atmospheric half-life</i>	• 0.855 d								
<i>Method</i>	• Estimated								
Bioaccumulative Potential									
<i>Propane, 2,2-bis[p-(2,3-epoxy-propoxy)phenyl]-, polymers</i>	Bioaccumulation: Bioconcentration potential is moderate (BCF between 100 and 3000 or log Pow between 3 and 5).								
	<table> <tr> <td><i>Partition coefficient: n-octanol/water (log Pow)</i></td><td>• 3.242 at 25°C Estimated</td></tr> </table>	<i>Partition coefficient: n-octanol/water (log Pow)</i>	• 3.242 at 25°C Estimated						
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<i>Bioconcentration factor (BCF)</i>	• 150 Estimated								
<i>Alkyl(C12-14) glycidyl ether</i>	Bioaccumulation: Bioconcentration potential is moderate (BCF between 100 and 3000 or log Pow between 3 and 5). No relevant data found.								
	<table> <tr> <td><i>Partition coefficient: n-octanol/water (log Pow)</i></td><td>• 3.77 at 20 °C OECD Test Guideline 107 or Equivalent</td></tr> <tr> <td><i>Bioconcentration factor (BCF)</i></td><td>• 160 Fish Estimated</td></tr> </table>	<i>Partition coefficient: n-octanol/water (log Pow)</i>	• 3.77 at 20 °C OECD Test Guideline 107 or Equivalent	<i>Bioconcentration factor (BCF)</i>	• 160 Fish Estimated				
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<i>Bioconcentration factor (BCF)</i>	• 160 Fish Estimated								
<i>Silica</i>	Bioaccumulation: Partitioning from water to n-octanol is not applicable								
<i>Naphtha (petroleum), heavy alkylate</i>	Bioaccumulation: Bioconcentration potential is moderate (BCF between 100 and 3000 or log Pow between 3 and 5).								
	<table> <tr> <td><i>Partition coefficient: n-octanol/water (log Pow)</i></td><td>• 5.67 Estimated</td></tr> <tr> <td><i>Bioconcentration factor (BCF)</i></td><td>• 460 Fish Estimated</td></tr> </table>	<i>Partition coefficient: n-octanol/water (log Pow)</i>	• 5.67 Estimated	<i>Bioconcentration factor (BCF)</i>	• 460 Fish Estimated				
<i>Partition coefficient: n-octanol/water (log Pow)</i>	• 5.67 Estimated								
<i>Bioconcentration factor (BCF)</i>	• 460 Fish Estimated								

12. ECOLOGICAL INFORMATION (CONTINUED)**Mobility in Soil**

<i>Propane, 2,2-bis[p-(2,3-epoxy-propoxy)phenyl]-, polymers</i>	Potential for mobility in soil is low (Koc between 500 and 2000). Given its very low Henry's constant, volatilization from natural bodies of water or moist soil is not expected to be an important fate process.
	<i>Partition coefficient (Koc)</i> • 1800 - 4400 Estimated
<i>Reaction product: Bisphenol F-(epichlorohydrin); epoxy resin</i>	Potential for mobility in soil is slight (Koc between 2000 and 5000).
	<i>Partition coefficient (Koc)</i> • 4460 Estimated
<i>Alkyl(C12-14) glycidyl ether</i>	Expected to be relatively immobile in soil (Koc > 5000).
	<i>Partition coefficient (Koc)</i> • > 5000 OECD 121: HPLC Method
<i>Silica</i>	No relevant data found.
<i>Naphtha (petroleum), heavy alkylate</i>	Potential for mobility in soil is slight (Koc between 2000 and 5000).
	<i>Partition coefficient (Koc)</i> • 2700 Estimated

13. DISPOSAL CONSIDERATIONS

Disposal Methods: DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. AS YOUR SUPPLIER, WE HAVE NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN MSDS SECTION: Composition Information. FOR UNUSED & UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted: Incinerator or other thermal destruction device.

14. TRANSPORT INFORMATION

DOT	Not regulated for transport
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Classification for SEA transport (IMO-IMDG)

<i>Proper shipping name</i>	Environmentally Hazardous Substance, Liquid, N.O.S. (Epoxy resin)
<i>UN number</i>	UN 3082
<i>Class</i>	9
<i>Packaging group</i>	III
<i>Marine pollutant</i>	Epoxy resin
<i>Transport in bulk according Consult IMO regulations before transporting ocean bulk to Annex I or II or MARPOL 73/78 and the IBC or IGC Code</i>	Consult IMO regulations before transporting ocean bulk

Classification for AIR transport (IATA/ICAO)

<i>Proper shipping name</i>	Environmentally hazardous substance, liquid, n.o.s. (Epoxy resin)
<i>UN number</i>	UN 3082
<i>Class</i>	9
<i>Packaging group</i>	III

This information is not intended to convey all specific regulatory or operational requirements/ information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

15. REGULATORY INFORMATION

<i>OSHA Hazard Communication Standard</i>	This product is a “Hazardous Chemical” as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
<i>Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312</i>	Acute Health Hazard
<i>Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 313</i>	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.
<i>Pennsylvania Worker and Community Right-To-Know Act</i>	To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.
<i>California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986)</i>	WARNING: This product contains a chemical(s) known to the State of California to cause cancer.
Components	CASRN
Benzene	71-43-2
Ethylbenzene	100-41-4
<i>California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986)</i>	WARNING: This product contains a chemical(s) known to the State of California to cause birth defects or other reproductive harm.
Components	CASRN
Benzene	71-43-2
<i>United States TSCA Inventory (TSCA)</i>	All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

16. OTHER INFORMATION

Hazard Rating System NFPA	Health	Fire 1	Reactivity
	1	1	0
Revision	Identification Number: 10000000090 /A476 Issue Date: 02/16/2016/Version: 1.0		
Legend	OSHA PO	• USA. OSHA – TABLE Z-1 Limits for Air contaminants – 1910.1000	
	OSHA Z-1	• USA. Occupational Exposure Limits (OSHA) – Table Z-1 Limits for Air Containants	
	OSHA Z-3	• USA. Occupational Exposure Limits (OSHA) – Table Z-3 Mineral Dusts	
	TWA	• 8-hr, time-weighted average	
Information Source and References	• This SDS is prepared by Product Regulatory Services and Hazard Communications Groups from information supplied by internal references within our company.		
Disclaimer	• MAXLINER urges each customer or recipient of this SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer’s/user’s responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer’s/user’s duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific SDSs, we are not and cannot be responsible for SDSs obtained from any source other than ourselves. If you have obtained an SDS from another source or if you are not sure that the SDS you have is current, please contact us for the most current version.		