

# SAFETY DATA SHEET

FOR INDUSTRIAL USE ONLY

EPIKOTE™ RESIN MGS LR 635

## Section 1. Product and company identification

**GHS product identifier** : EPIKOTE™ RESIN MGS LR 635  
**MSDS Number** : 300000030631  
**Product type** : Epoxy Resin  
**Material uses** : Epoxy Resin Systems

**Manufacturer/Supplier/Importer** : Westlake Epoxy Inc.  
12650 DIRECTORS DR STE 100  
Stafford, Texas 77477  
USA

**Contact person** : epoxy@westlake.com

**Telephone** : For additional health and safety or regulatory information, call  
1 888 443 9466.

**Emergency telephone number** : For Emergency Medical Assistance  
Call Health & Safety Information Services  
1-866-303-6949

For Emergency Transportation Information  
CHEMTREC US Domestic (800) 424-9300  
CHEMTREC International (703) 527-3887  
CANUTEC CA Domestic (613) 996-6666

## Section 2. Hazards identification

**Classification of the substance or mixture** : EYE IRRITATION - Category 2A  
SKIN SENSITISATION - Category 1  
SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE  
[Respiratory tract irritation] - Category 3  
SKIN IRRITATION - Category 2

### GHS label elements

**Hazard pictograms** :



**Signal word** :

Warning

**Hazard statements** :

H319 Causes serious eye irritation.  
H317 May cause an allergic skin reaction.  
H335 May cause respiratory irritation.  
H315 Causes skin irritation.

**Precautionary statements**

- General** : Not applicable.
- Prevention** : Wear protective gloves.  
Wear eye or face protection.  
Use only outdoors or in a well-ventilated area.  
Avoid breathing vapor.  
Wash hands 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.  
Call a POISON CENTER or physician if you feel unwell.  
**IF ON SKIN:**  
Wash with plenty of soap and water.  
Wash contaminated clothing before reuse.  
If skin irritation or rash occurs:  
Get medical attention.  
**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 attention.
- Storage** : Store locked up.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Other hazards which do not result in classification** : None known.

**Section 3. Composition/information on ingredients**

**Substance/mixture** : Mixture

Ingredient name	% by weight	CAS number
4,4'-Isopropylidenediphenol-Epichlorohydrin Copolymer	90 - 100	25068-38-6
Phenolic Novolac Resin (Proprietary)	10 - 25	
Glycidated Alcohol (Proprietary)	0 - 10	

**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. 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 it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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 necessary, call a poison center or physician. 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** : Wash with plenty of soap and 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. In the event of any complaints or symptoms, avoid further exposure. 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 if adverse health effects persist or are severe. 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.

#### **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 aid personnel** : 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** : No specific data. Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
halogenated compounds
- 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 specialised 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 material 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 of SDS). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 of SDS for emergency contact information and section 13 of SDS for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** :
- Put on appropriate personal protective equipment (see section 8 of SDS). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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 of SDS) 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
Glycidated Alcohol (Proprietary)	None.
Phenolic Novolac Resin (Proprietary)	None.
4,4'-Isopropylidenediphenol-Epichlorohydrin Copolymer	None.

- Recommended monitoring procedures** :
- If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
- Appropriate engineering controls** :
- Use only with adequate ventilation. 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. Contaminated work clothing should not be allowed out of the workplace. 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: chemical splash goggles.

**Skin 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** : Clear
- Odor** : None.
- Odor threshold** : Not available
- pH** : Not available
- Melting point/ Freezing point** : Not available
- Boiling point** : 200 °C (392 °F)
- Flash point** : Greater than 200 °C (392 °F)
- Burning time** : Not available

<b>Burning rate</b>	:	Not available
<b>Evaporation rate</b>	:	Not available
<b>Flammability (solid, gas)</b>	:	Not available
<b>Lower and upper explosive (flammable) limits</b>	:	<b>Lower:</b> Not available <b>Upper:</b> Not available
<b>Vapor pressure</b>	:	Not available
<b>Vapor density</b>	:	Not available
<b>Relative density</b>	:	1.15
<b>Density</b>	:	1.150 g/cm <sup>3</sup>
<b>Solubility</b>	:	Not available
<b>Solubility in water</b>	:	Not available
<b>Partition coefficient: n-octanol/water</b>	:	Not available
<b>Auto-ignition temperature</b>	:	Not available
<b>Decomposition temperature</b>	:	Not available
<b>SADT</b>	:	Not available
<b>Viscosity</b>	:	<b>Dynamic:</b> 3,100 mPa·s
		<b>Kinematic:</b> Not available

#### Other information

The SDS is not to be used as a specification sheet. For Specific technical information on the product listed above, a sales specification sheet should be obtained from your Hexion representative.

## Section 10. Stability and reactivity

<b>Reactivity</b>	:	Stable under normal conditions.
<b>Chemical stability</b>	:	The product is stable.
<b>Possibility of hazardous reactions</b>	:	Under normal conditions of storage and use, hazardous reactions will not occur.
<b>Conditions to avoid</b>	:	Strong oxidizer, No specific data.
<b>Incompatible materials</b>	:	No specific data. No specific data.
<b>Hazardous decomposition products</b>	:	Under normal conditions of storage and use, hazardous decomposition products should not be produced. 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
Glycidated Alcohol (Proprietary)				
	LD50 Oral	Rat	17,100 mg/kg	-

Phenolic Novolac Resin (Proprietary)				
	LD50 Oral	Rat	> 2,000 mg/kg	-
	LD50 Dermal	Rabbit	> 2,000 mg/kg	-
4,4'-Isopropylidenediphenol-Epichlorohydrin Copolymer				
	LD50 Oral	Rat	11,400 mg/kg	-
	LD50 Dermal	Rat	2,000 mg/kg	-

**Conclusion/Summary** : Not available

### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Glycidated Alcohol (Proprietary)	Skin - Primary dermal irritation index (PDII) OTS 798.4470 Acute Dermal Irritation	Rabbit	4.1	24 hrs	72 hrs
	Skin - Primary dermal irritation index (PDII) 404 Acute Dermal Irritation/Corrosion	Rabbit	5.75	24 hrs	72 hrs
	eyes - Cornea opacity 405 Acute Eye Irritation/Corrosion	Rabbit	2		1 - 24 hrs
	Skin - Moderate irritant	Rabbit		24 hrs	-
Phenolic Novolac Resin (Proprietary)	Skin - Erythema/E schar 404 Acute Dermal Irritation/Corrosion	Rabbit	0.7	4 hrs	72 hrs
	Skin - Edema 404 Acute Dermal Irritation/Corrosion	Rabbit	0	4 hrs	4 - 504 hrs
	eyes - Cornea	Rabbit	0		1 - 168 hrs



	opacity 405 Acute Eye Irritation/Co rosion				
	eyes - Iris lesion 405 Acute Eye Irritation/Co rosion	Rabbit	0		1 - 168 hrs
	eyes - Redness of the conjunctiva e 405 Acute Eye Irritation/Co rosion	Rabbit	0		1 - 168 hrs
	eyes - Edema of the conjunctiva e 405 Acute Eye Irritation/Co rosion	Rabbit	0		1 - 168 hrs
	Skin - Mild irritant	Rabbit		24 hrs	-
4,4'-Isopropylidenediphenol- Epichlorohydrin Copolymer	Skin - Erythema/E schar 404 Acute Dermal Irritation/Co rosion	Rabbit	1.5 - 2		-
	Skin - Edema 404 Acute Dermal Irritation/Co rosion	Rabbit	1.0 - 1.5		-
	eyes - - 405 Acute Eye Irritation/Co rosion	Rabbit	0		-
	eyes - Redness of the conjunctiva e	Rabbit	0.7		-
	Skin - Moderate irritant	Rabbit		24 hrs	-
	Skin - Severe irritant	Rabbit		24 hrs	-

	eyes - Mild irritant	Rabbit			-
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**Conclusion/Summary**

**Skin** : Not available  
**eyes** : Not available  
**Respiratory** : Not available

**Sensitization****Conclusion/Summary**

**Skin** : Not available  
**Respiratory** : Not available

**Mutagenicity****Conclusion/Summary**

: Not available

**Carcinogenicity****Conclusion/Summary**

: Not available

**Reproductive toxicity****Conclusion/Summary**

: Not available

**Teratogenicity****Conclusion/Summary**

: Not available

**Specific target organ toxicity (single exposure)**

Product/ingredient name	Category	Route of exposure	Target organs
4,4'-Isopropylidenediphenol-Epichlorohydrin Copolymer			
Phenolic Novolac Resin (Proprietary)	Category 3		Respiratory tract irritation

**Specific target organ toxicity (repeated exposure)**

Not available

**Aspiration hazard**

Not available

**Information on likely routes of exposure**

: Not available

**Potential acute health effects**

**Eye contact** : Causes serious eye irritation.  
**Inhalation** : May cause respiratory irritation.  
**Skin contact** : Causes skin irritation. May cause an allergic skin reaction.  
**Ingestion** : No known significant effects or critical hazards.

**Symptoms related to the physical, chemical and toxicological characteristics**

**Eye contact** : Adverse symptoms may include the following:  
 pain or irritation

	watering redness
<b>Inhalation</b>	: Adverse symptoms may include the following: respiratory tract irritation
	coughing
<b>Skin contact</b>	: Adverse symptoms may include the following: irritation
	redness
<b>Ingestion</b>	: No specific data.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

#### Short term exposure

<b>Potential immediate effects</b>	: Not available
<b>Potential delayed effects</b>	: Not available

#### Long term exposure

<b>Potential immediate effects</b>	: Not available
<b>Potential delayed effects</b>	: Not available

### Potential chronic health effects

<b>Conclusion/Summary</b>	: Not available
<b>General</b>	: Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
<b>Carcinogenicity</b>	: No known significant effects or critical hazards.
<b>Mutagenicity</b>	: No known significant effects or critical hazards.
<b>Teratogenicity</b>	: No known significant effects or critical hazards.
<b>Developmental effects</b>	: No known significant effects or critical hazards.
<b>Fertility effects</b>	: No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

Not available

## **Section 12. Ecological information**

### Toxicity

Product/ingredient name	Result	Species	Exposure
Glycidated Alcohol (Proprietary)			
	Acute LC50 > 1.8 g/l - 203 Fish, Acute Toxicity Test	Fish - Rainbow trout, donaldson trout	96 h
	Acute LC50 > 5.0 g/l - 203 Fish, Acute Toxicity Test	Fish - Bluegill	96 h
	Acute EC50 7.2 mg/l - 202 Daphnia sp. Acute Immobilization Test and Reproduction Test	Aquatic invertebrates. Water flea	48 h
	Acute EC50 844 mg/l - 201 Alga,	Aquatic plants - Algae	72 h

	Growth Inhibition Test		
Phenolic Novolac Resin (Proprietary)			
	Acute LC50 2.54 mg/l -	Fish - Fish	96 h
	Acute EC50 2.55 mg/l - 202 Daphnia sp. Acute Immobilization Test and Reproduction Test	Aquatic invertebrates. Water flea	48 h
	Acute EC50 > 1,000 mg/l - 201 Alga, Growth Inhibition Test	Aquatic plants - Algae	72 h
bis-[4-(2,3-epoxipropoxy)phenyl]propane			
	Acute LC50 1.3 mg/l - 203 Fish, Acute Toxicity Test	Fish - Fish	96 h
	Acute EC50 2.1 mg/l - 202 Daphnia sp. Acute Immobilization Test and Reproduction Test	Aquatic invertebrates. Water flea	48 h
	Acute LC50 > 11 mg/l -	Aquatic plants - Algae	72 h
	Chronic No-observable-effect-concentration 0.3 mg/l semi-static test 211 Daphnia Magna Reproduction Test	Aquatic invertebrates. Water flea	21 d

**Conclusion/Summary** : Not available

**Persistence/degradability**

**Conclusion/Summary** : Not available

**Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
Glycidated Alcohol (Proprietary)	3.77	160 - 263 160.00	low
Phenolic Novolac Resin (Proprietary)	3.3	150 150.00	low
bis-[4-(2,3-epoxipropoxy)phenyl]propane	2.64 - 3.78	3 - 31 31.00	low

**Mobility in soil**

**Soil/water partition coefficient (KOC)** : 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

The data provided in this section is for information only and may not be specific to your package size or mode of transport. You will need to apply the appropriate regulations to properly classify your shipment for transportation.

### International transport regulations

Regulatory information	UN/NA number	Proper shipping name	Classes/*PG	Reportable Quantity (RQ)
CFR		Non-regulated		
TDG		Non-regulated		
IMO/IMDG	3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (EPOXIDE DERIVATIVES)	Class 9 III	
IATA (Cargo)	3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (EPOXIDE DERIVATIVES)	Class 9 III	

\*PG : Packing group

Environmentally hazardous and/or Marine Pollutant : Yes.



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.

## Section 15. Regulatory information

### United States

U.S. Federal regulations : **United States - TSCA 12(b) - Chemical export notification:** None required.  
**United States - TSCA 5a2 - Final significant new use rules:** Not listed  
**United States - TSCA 5a2 - Proposed significant new use rules:** Not listed  
**United States - TSCA 5(e) - Substances consent order:** Not listed  
**SARA 311/312 Classification - Immediate (acute) health hazard**

**California Prop. 65:**

This product does not require a Safe Harbor warning under California Prop. 65.

**United States inventory (TSCA 8b)** : All components are active or exempted.

**International regulations**

**International lists** :

- Australia inventory (AICS):** All components are listed or exempted.
- Canada inventory:** All components are listed or exempted.
- Japan inventory:** All components are listed or exempted.
- China inventory (IECSC):** All components are listed or exempted.
- Korea inventory (KECI):** All components are listed or exempted.
- New Zealand Inventory (NZIoC):** All components are listed or exempted.
- Philippines inventory (PICCS):** All components are listed or exempted.
- United States inventory (TSCA 8b):** All components are active or exempted.
- Taiwan inventory (TCSI):** All components are listed or exempted.

<b>Section 16. Other information</b>
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**Hazardous Material Information System III (U.S.A.) :**

<b>Health</b>	*	2
<b>Flammability</b>		1
<b>Physical hazards</b>		0

**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 MSDSs 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.**

**The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.**

**Full text of abbreviated H statements** : Not applicable.

**History**

**Date of printing** : 08/16/2022  
**Date of issue/Date of revision** : 03/23/2020  
**Date of previous issue** : 11/28/2017  
**Version** : 1.1  
**Prepared by** : Product Safety Stewardship  
**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)
- RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail

**References**

UN = United Nations  
: Not available

**Notice to reader**

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.

## SAFETY DATA SHEET

FOR INDUSTRIAL USE ONLY

EPIKURE™ CURING AGENT MGS LH 635

## Section 1. Product and company identification

<b>GHS product identifier</b>	:	EPIKURE™ CURING AGENT MGS LH 635
<b>MSDS Number</b>	:	300000031070
<b>Product type</b>	:	Epoxy Curing Agent
<b>Material uses</b>	:	Epoxy Resin Systems
<b>Manufacturer/Supplier/Importer</b>	:	Westlake Epoxy Inc. 12650 DIRECTORS DR STE 100 Stafford, Texas 77477 USA
<b>Contact person</b>	:	epoxyservice@westlake.com
<b>Telephone</b>	:	For additional health and safety or regulatory information, call 1 888 443 9466.
<b>Emergency telephone number</b>	:	For Emergency Medical Assistance Call Health & Safety Information Services 1-866-303-6949 For Emergency Transportation Information CHEMTREC US Domestic (800) 424-9300 CHEMTREC International (703) 527-3887 CANUTEC CA Domestic (613) 996-6666

## Section 2. Hazards identification

<b>Classification of the substance or mixture</b>	:	ACUTE TOXICITY oral - Category 4 ACUTE TOXICITY inhalation - Category 4 SKIN CORROSION - Category 1B SERIOUS EYE DAMAGE - Category 1 SKIN SENSITISATION - Category 1
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GHS label elements**Hazard pictograms****Signal word****Hazard statements**

:	Danger
:	H302 Harmful if swallowed.
:	H332 Harmful if inhaled.
:	H314 Causes severe skin burns and eye damage.
:	H318 Causes serious eye damage.
:	H317 May cause an allergic skin reaction.



**Precautionary statements**

- General** : Not applicable.
- Prevention** : Wear protective gloves, protective clothing and eye or face protection.  
Use only outdoors or in a well-ventilated area.  
Avoid breathing vapor.  
Do not eat, drink or smoke when using this product.  
Wash thoroughly after handling.
- Response** : IF INHALED:  
Remove person to fresh air and keep comfortable for breathing.  
Immediately call a POISON CENTER or doctor.  
IF SWALLOWED:  
Immediately call a POISON CENTER or doctor.  
Rinse mouth. Do NOT induce vomiting.  
IF ON SKIN (or hair):  
Take off immediately all contaminated clothing. Rinse skin with water.  
Immediately call a POISON CENTER or doctor.  
Wash contaminated clothing before reuse.  
IF ON SKIN:  
Wash with plenty of water.  
If skin irritation or rash occurs:  
Get medical advice or attention.  
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.
- Storage** : Store locked up.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Other hazards which do not result in classification** : None known.

**Section 3. Composition/information on ingredients**

**Substance/mixture** : Mixture

Ingredient name	% by weight	CAS number
Aliphatic Amine (Proprietary)	25 - 50	* *
Alkyletheramine (Proprietary)	25 - 50	* *
Organic Acid (Proprietary)	0 - 3	* *

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

\*\* The specific chemical identity/proportion of this component is considered trade secret information in accordance with 29 CFR 1910.1200.

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

- |                     |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---------------------|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Eye contact</b>  | : | Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Inhalation</b>   | : | Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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. 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.                                                                                                                                            |
| <b>Skin contact</b> | : | Get medical attention immediately. Call a poison center or physician. Wash with plenty of soap and 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. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Ingestion</b>    | : | Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician. 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. |

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

- |                                          |   |                                                                                                                                         |
|------------------------------------------|---|-----------------------------------------------------------------------------------------------------------------------------------------|
| <b>Notes to physician</b>                | : | Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.               |
| <b>Specific treatments</b>               | : | No specific treatment.                                                                                                                  |
| <b>Protection of first aid personnel</b> | : | 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 dry chemical, CO<sub>2</sub>, alcohol-resistant foam or water spray (fog).
- 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.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
nitrogen 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. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**For emergency responders** : If specialised 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 material 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 of SDS). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 of SDS for emergency contact information and section 13 of SDS for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

- |                                                                     |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|---------------------------------------------------------------------|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Protective measures</b>                                          | : | Put on appropriate personal protective equipment (see section 8 of SDS). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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. |
| <b>Advice on general occupational hygiene</b>                       | : | 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.                                                                                                                                                                                                                                                                   |
| <b>Conditions for safe storage, including any incompatibilities</b> | : | 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 of SDS) 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
Aliphatic Amine (Proprietary)	<b>ACGIH TLV (1994-09-01)</b> <b>CEIL 0.1 mg/m<sup>3</sup></b> Notes: Absorbed through skin. <b>OSHA PEL 1989 (1989-03-01)</b> <b>CEIL 0.1 mg/m<sup>3</sup></b> Notes: Absorbed through skin.

	<b>NIOSH REL (1994-06-01)</b> <b>CEIL 0.1 mg/m<sup>3</sup></b> Notes: Absorbed through skin.
Alkyletheramine (Proprietary)	None.
Organic Acid (Proprietary)	None.

- Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
- Appropriate engineering controls** : Use only with adequate ventilation. 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. Contaminated work clothing should not be allowed out of the workplace. 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: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

### Skin 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** : Blue-green
- Odor** : amine.
- Odor threshold** : Not available
- pH** : 10.8
- Melting point/ Freezing point** : Not available
- Boiling point** : Not available
- Flash point** : Greater than 100 °C (212 °F)
- Burning time** : Not available
- Burning rate** : Not available
- Evaporation rate** : Not available
- Flammability (solid, gas)** : Not available
- Lower and upper explosive (flammable) limits** : **Lower:** Not available  
**Upper:** Not available
- Vapor pressure** : Not available
- Vapor density** : Not available
- Relative density** : Not available
- Density** : 1.04 - 1.08 g/cm<sup>3</sup>
- Solubility** : Not available
- Solubility in water** : Not available
- Partition coefficient: n-octanol/water** : Not available
- Auto-ignition temperature** : Not available
- Decomposition temperature** : Not available
- SADT** : Not available
- Viscosity** : **Dynamic:** 50.000 - 353.000 mPa·s @ 25 °C (77 °F) (ISO 9371)
- Kinematic:** Not available

### Other information

No additional information.

## Section 10. Stability and reactivity

- Reactivity** : Stable under normal conditions.
- 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
Aliphatic Amine (Proprietary)				
	LD50 Oral	Rat	930 mg/kg	-
	LC50 Inhalation	Rat	3.89 mg/l	1 h
	LC50 Inhalation	Rat	2.4 mg/l	4 h
	LC50 Inhalation	Rat - Female	0.8 mg/l	4 h
	LD50 Dermal	Rabbit	2,000 mg/kg	-
Alkyletheramine (Proprietary)				
	LD50 Oral	Rat	2,885 mg/kg	-
	LD50 Dermal	Rabbit	2,980 mg/kg	-
Organic Acid (Proprietary)				
	LD50 Oral	Rat	891 mg/kg	-
	LD50 Dermal	Rabbit	> 10,000 mg/kg	-

**Conclusion/Summary** : Not available

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Aliphatic Amine (Proprietary)	Skin - Severe irritant	Rabbit		24 hrs	-
	eyes - Severe irritant	Rabbit		24 hrs	-
Alkyletheramine (Proprietary)	eyes - Severe irritant	Rabbit			-

**Conclusion/Summary**

- Skin** : Not available
- eyes** : Not available
- Respiratory** : Not available

#### Sensitization

**Conclusion/Summary**

- Skin** : Not available
- Respiratory** : Not available

**Mutagenicity**

**Conclusion/Summary** : Not available

**Carcinogenicity**

**Conclusion/Summary** : Not available

**Reproductive toxicity**

**Conclusion/Summary** : See below for potential chronic health effects

**Teratogenicity**

**Conclusion/Summary** : Not available

**Specific target organ toxicity (single exposure)**

Not available

**Specific target organ toxicity (repeated exposure)**

Not available

**Aspiration hazard**

Not available

**Information on likely routes of exposure** : Not available

**Potential acute health effects**

**Eye contact** : Causes serious eye damage.  
**Inhalation** : Harmful if inhaled.  
**Skin contact** : Causes severe burns. May cause an allergic skin reaction.  
**Ingestion** : Harmful if swallowed.

**Symptoms related to the physical, chemical and toxicological characteristics**

**Eye contact** : Adverse symptoms may include the following:  
 pain  
 watering  
 redness  
 Adverse symptoms may include the following:  
 pain  
 watering  
 redness

**Inhalation** : Adverse symptoms may include the following:  
 wheezing and breathing difficulties  
 asthma  
 nausea or vomiting  
 headache  
 drowsiness/fatigue  
 dizziness/vertigo  
 unconsciousness  
 No specific data.

**Skin contact** : Adverse symptoms may include the following:  
 pain or irritation  
 redness



- blistering may occur  
 pain or irritation  
 redness  
 blistering may occur
- Ingestion** : Adverse symptoms may include the following:  
 stomach pains  
 Adverse symptoms may include the following:  
 stomach pains

### Delayed and immediate effects as well as 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

- Conclusion/Summary** : Not available
- General** : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
- 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.

### Numerical measures of toxicity

#### Acute toxicity estimates

Product/ingredient name	Oral	Dermal	Inhalation (gases)	Inhalation (vapors)	Inhalation (dusts and mists)
EPIKURE™ CURING AGENT MGS LH 635	1,691.9 mg/kg	8,032.9 mg/kg	N/A	N/A	3.8 mg/l
Aliphatic Amine (Proprietary)	930 mg/kg	N/A	N/A	N/A	1.5 mg/l
Alkyletheramine (Proprietary)	2,885 mg/kg	2,980 mg/kg	N/A	N/A	N/A
Organic Acid (Proprietary)	891 mg/kg	N/A	N/A	N/A	N/A

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result	Species	Exposure
Organic Acid (Proprietary)	Acute EC50 870 mg/l Fresh water	Aquatic invertebrates.	48 h

		Daphnia	
	Chronic No-observable-effect-concentration 5.6 mg/l Fresh water	Aquatic invertebrates. Daphnia	21 d

**Conclusion/Summary** : Not available

#### Persistence/degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Alkyletheramine (Proprietary)	OECD-Guideline 301 B (CO2 Evolution Test)	0 % - 28 d		
<b>Remarks:</b>	The product is not biodegradable.			

**Conclusion/Summary** : Not available

#### Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Aliphatic Amine (Proprietary)	0.18	2.69	low
Alkyletheramine (Proprietary)	1.34	-	low
Organic Acid (Proprietary)	2.21 - 2.26	-	low

#### Mobility in soil

**Soil/water partition coefficient (KOC)** : 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**

The data provided in this section is for information only and may not be specific to your package size or mode of transport. You will need to apply the appropriate regulations to properly classify your shipment for transportation.

**International transport regulations**

<b>Regulatory information CFR</b>	<b>UN/NA number</b>	<b>Proper shipping name</b>	<b>Classes/*PG</b>	<b>Reportable Quantity (RQ)</b>
	2735	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (Aliphatic Amine)	Class 8 II	
<b>IMO/IMDG</b>	2735	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (Aliphatic Amine)	Class 8 II	
<b>IATA (Cargo)</b>	2735	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (Aliphatic Amine)	Class 8 II	

\*PG : Packing group

**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.

<b>Section 15. Regulatory information</b>
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**United States**

**U.S. Federal regulations** : **United States - TSCA 12(b) - Chemical export notification:** None required.  
**United States - TSCA 5a2 - Final significant new use rules:** Not listed  
**United States - TSCA 5a2 - Proposed significant new use rules:** Not listed  
**United States - TSCA 5(e) - Substances consent order:** Not listed  
**SARA 311/312 Classification - ACUTE TOXICITY, oral, Category 4**  
**SARA 311/312 Classification - ACUTE TOXICITY, inhalation, Category 4**  
**SARA 311/312 Classification - SKIN CORROSION, Category 1B**  
**SARA 311/312 Classification - SERIOUS EYE DAMAGE, Category 1**  
**SARA 311/312 Classification - SKIN SENSITISATION, Category 1**  
**SARA 311/312 Classification - Not applicable**

**California Prop. 65:**

WARNING: This product may contain one or more chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.

**United States inventory (TSCA 8b)** : All components are active or exempted.

**International regulations**

- International lists** :
- Australia inventory (AICS):** All components are listed or exempted.
  - Canada inventory:** All components are listed or exempted.
  - Japan inventory:** All components are listed or exempted.
  - China inventory (IECSC):** All components are listed or exempted.
  - Korea inventory (KECD):** All components are listed or exempted.
  - New Zealand Inventory (NZIoC):** All components are listed or exempted.
  - Philippines inventory (PICCS):** All components are listed or exempted.
  - United States inventory (TSCA 8b):** All components are active or exempted.
  - Taiwan inventory (TCSI):** All components are listed or exempted.

## Section 16. Other information

### Hazardous Material Information System III (U.S.A.) :

<b>Health</b>	*	3
<b>Flammability</b>		1
<b>Physical hazards</b>		0

**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 MSDSs 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.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

**Full text of abbreviated H statements** : Not applicable.

### History

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- Date of issue/Date of revision** : 05/31/2022
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- Version** : 1.1
- Prepared by** : Product Safety Stewardship
- 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)
  - RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
  - UN = United Nations

**References** : Not available

### Notice to reader

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.