

Issue date 05/15/2019

Reviewed on 05/15/2019

1. Identification

Product identifier *EP-CLEARSEAL Component B*

Product Description Clear Epoxy Sealer

Recommended use No further relevant information available

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name E-Chem, LLC

Address 4102 El Rey Rd. SE
 Albuquerque, NM 87105
 United States

Telephone 505.217.2121

Fax 505.217.3721

Website www.e-chem.net

E-mail mail@e-chem.net

Emergency phone number Chemtrec 1-800-424-9300 24 Hours
 Outside the U.S., call Chemtrec collect at 703-527-3887

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Acute toxicity, oral Category 4
 Acute toxicity, dermal Category 4
 Skin corrosion/irritation Category 1
 Sensitization, skin Category 1
 Reproductive toxicity Category 2

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

OSHA defined hazards Not classified.

Label elements



Signal word Danger

Hazard statement Harmful if swallowed. Harmful in contact with skin. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Suspected of damaging fertility or the unborn child. Toxic to aquatic life with long lasting effects.

Precautionary statement

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist/vapors. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing must not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

Response If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. Collect spillage.

Issue date 05/15/2019

Reviewed on 05/15/2019

Trade name: EP-CLEARSEAL Component B

Storage	Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	30% of the mixture consists of component(s) of unknown acute oral toxicity. 70% of the mixture consists of component(s) of unknown acute dermal toxicity.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Benzyl Alcohol		100-51-6	20 - 40
1,3-benzenedimethanamine, Polymer With 2,2'-[(1-methyl-ethylidene)bis(4,1-p henyleneoxymethylene)]bis[oxirane]		110839-13-9	15 - 30
4-tert-butylphenol		98-54-4	15 - 30
Xylylenediamine, M-		1477-55-0	15 - 30
1,3-cyclohexanedimethanamine		2579-20-6	5 - 15

4. First-aid measures

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.
Ingestion	Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
Most important symptoms/effects, acute and delayed	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
General information	IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media	Alcohol resistant foam. Powder. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.

(Contd. on page 3)

Issue date 05/15/2019

Reviewed on 05/15/2019

Trade name: EP-CLEARSEAL Component B

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

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

Methods and materials for containment and cleaning up

This product is miscible in water. This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways.

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

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

Never return spills to original containers for re-use.

Environmental precautions

Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist/vapors. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Avoid prolonged exposure. When using, do not eat, drink or smoke. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store locked up. Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

US. ACGIH Threshold Limit Values

Components	Type	Value
Xylylenediamine, M- (CAS 1477-55-0)	Ceiling	0.1 mg/m3

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Xylylenediamine, M- (CAS 1477-55-0)	Ceiling	0.1 mg/m3

US. Workplace Environmental Exposure Level (WEEL) Guides

Components	Type	Value
Benzyl Alcohol (CAS 100-51-6)	TWA	44.2 mg/m3
		10 ppm

Issue date 05/15/2019

Reviewed on 05/15/2019

Trade name: EP-CLEARSEAL Component B

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

Exposure guidelines

US - California OELs: Skin designation

Xylylenediamine, M- (CAS 1477-55-0) Can be absorbed through the skin.

US - Tennessee OELs: Skin designation

Xylylenediamine, M- (CAS 1477-55-0) Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

Xylylenediamine, M- (CAS 1477-55-0) Can be absorbed through the skin.

US NIOSH Pocket Guide to Chemical Hazards: Skin designation

Xylylenediamine, M- (CAS 1477-55-0) Can be absorbed through the skin.

Appropriate engineering controls

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

Individual protection measures, such as personal protective equipment

Eye/face protection Chemical respirator with organic vapor cartridge and full facepiece.

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

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

Respiratory protection Chemical respirator with organic vapor cartridge and full facepiece.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Observe any medical surveillance requirements. Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

Appearance

Physical state Liquid.

Form Liquid.

Color Amber

Odor Amine-like.

Odor threshold Not available.

pH Alkaline

Melting point/freezing point 4.64 °F (-15.2 °C) estimated

Initial boiling point and boiling range > 392 °F (> 200 °C) estimated

Flash point > 200.0 °F (> 93.3 °C) Setflash estimated

Evaporation rate < 1

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Explosive limit - lower (%) Not available.

Issue date 05/15/2019

Reviewed on 05/15/2019

Trade name: EP-CLEARSEAL Component B

Explosive limit - upper (%)	Not available.
Vapor pressure	< 0.01 hPa @20C
Vapor density	> 1
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Partially
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	816.8 °F (436 °C) estimated
Decomposition temperature	Not available.
Viscosity	225 - 325 cP
Viscosity temperature	77 °F (25 °C)
Other information	
Bulk density	8.58 lb/gal
Density	1.04 g/cm ³ estimated
Explosive properties	Not explosive.
Flammability class	Combustible III B estimated
Oxidizing properties	Not oxidizing.
Percent volatile	40 % estimated
Specific gravity	1.03
VOC	40 % estimated

10. Stability and reactivity

Reactivity	Mixtures with strongly acidic and strongly alkaline materials may produce an exothermic reaction.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Alkaline metals. Acids, oxidizing agents, epoxies, isocyanates.
Hazardous decomposition products	Thermal decomposition will generate carbon monoxide, carbon dioxide, oxides of nitrogen, nitric acid, ammonia, aldehydes, flammable hydrocarbon fragments.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause irritation to the respiratory system. Prolonged inhalation may be harmful.
Skin contact	Causes severe skin burns. Harmful in contact with skin. May cause an allergic skin reaction.
Eye contact	Causes serious eye damage.
Ingestion	Causes digestive tract burns. Harmful if swallowed.
Symptoms related to the physical, chemical and toxicological characteristics	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Information on toxicological effects

Acute toxicity	Harmful in contact with skin. Harmful if swallowed.
-----------------------	---

Issue date 05/15/2019

Reviewed on 05/15/2019

Trade name: EP-CLEARSEAL Component B

Components	Species	Test Results
1,3-cyclohexanedimethanamine (CAS 2579-20-6)		
Acute		
Oral		
LD50	Rat	300 - 2000 mg/kg
4-tert-butylphenol (CAS 98-54-4)		
Acute		
Oral		
LD50	Rat	> 2000 mg/kg
Benzyl Alcohol (CAS 100-51-6)		
Acute		
Inhalation		
LC50	Rat	1000 mg/l, 8 Hours
Oral		
LD50	Rat	1230 - 3100 mg/kg
Xylylenediamine, M- (CAS 1477-55-0)		
Acute		
Dermal		
LD50	Rabbit	2000 mg/kg
Oral		
LD50	Rat	930 mg/kg
Skin corrosion/irritation	Causes severe skin burns and eye damage.	
Serious eye damage/eye irritation	Causes serious eye damage.	
Respiratory or skin sensitization		
Respiratory sensitization	Due to partial or complete lack of data the classification is not possible.	
Skin sensitization	May cause an allergic skin reaction.	
Germ cell mutagenicity	Due to partial or complete lack of data the classification is not possible.	
Carcinogenicity	Due to partial or complete lack of data the classification is not possible.	
IARC Monographs. Overall Evaluation of Carcinogenicity		
Not listed.		
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)		
Not listed.		
US. National Toxicology Program (NTP) Report on Carcinogens		
Not listed.		
Reproductive toxicity	Suspected of damaging fertility or the unborn child.	
Specific target organ toxicity - single exposure	Due to partial or complete lack of data the classification is not possible.	
Specific target organ toxicity - repeated exposure	Due to partial or complete lack of data the classification is not possible.	
Aspiration hazard	Due to partial or complete lack of data the classification is not possible.	
Chronic effects	Prolonged inhalation may be harmful.	

Issue date 05/15/2019

Reviewed on 05/15/2019

Trade name: EP-CLEARSEAL Component B

12. Ecological information

Ecotoxicity Toxic to aquatic life with long lasting effects.

Components	Species	Test Results
4-tert-butylphenol (CAS 98-54-4)		
Aquatic		
Crustacea	EC50	Water flea (Daphnia magna) 3.4 - 4.5 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas) 4.71 - 5.62 mg/l, 96 hours
Benzyl Alcohol (CAS 100-51-6)		
Aquatic		
Fish	LC50	Bluegill (Lepomis macrochirus) 10 mg/l, 96 hours

Persistence and degradability No data is available on the degradability of any ingredients in the mixture.

Bioaccumulative potential
Partition coefficient n-octanol / water (log Kow)

Benzyl Alcohol 1.1

Mobility in soil No data available.

Other adverse effects The product contains volatile organic compounds which have a photochemical ozone creation potential.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Incinerate the material under controlled conditions in an approved incinerator. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code D002: Waste Corrosive material [pH <=2 or >=12.5, or corrosive to steel]
The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

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

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

14. Transport information

DOT

UN number	UN2735
UN proper shipping name	Polyamines, liquid, corrosive, n.o.s. (1,3-cyclohexanedimethanamine, Xylylenediamine, M-), MARINE POLLUTANT
Transport hazard class(es)	
Class	8
Subsidiary risk	-
Label(s)	8
Packing group	III
Environmental hazards	
Marine pollutant	Yes
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

Issue date 05/15/2019

Reviewed on 05/15/2019

Trade name: EP-CLEARSEAL Component B

Special provisions IB3, T7, TP1, TP28
 Packaging exceptions 154
 Packaging non bulk 203
 Packaging bulk 241

IATA

UN number UN2735
 UN proper shipping name Amines, liquid, corrosive, n.o.s. (1,3-cyclohexanedimethanamine, Xylylenediamine, M-)
 Transport hazard class(es)
 Class 8
 Subsidiary risk -
 Packing group III
 Environmental hazards No.
 ERG Code 8L
 Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
 Other information

 Passenger and cargo aircraft Allowed with restrictions.
 Cargo aircraft only Allowed with restrictions.

IMDG

UN number UN2735
 UN proper shipping name POLYAMINES, LIQUID, CORROSIVE, N.O.S. (1,3-cyclohexanedimethanamine, Xylylenediamine, M-), MARINE POLLUTANT
 Transport hazard class(es)
 Class 8
 Subsidiary risk -
 Packing group III
 Environmental hazards
 Marine pollutant Yes
 EmS F-A, S-B
 Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.

DOT



IATA; IMDG

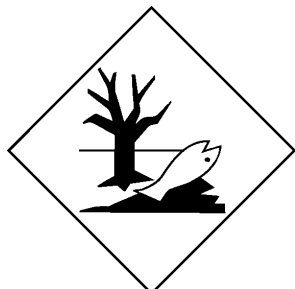


Issue date 05/15/2019

Reviewed on 05/15/2019

Trade name: EP-CLEARSEAL Component B

Marine pollutant



General information IMDG Regulated Marine Pollutant. DOT Regulated Marine Pollutant.

15. Regulatory information

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

Toxic Substances Control Act (TSCA)

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

Classified hazard categories Acute toxicity (any route of exposure)
 Skin corrosion or irritation
 Respiratory or skin sensitization
 Reproductive toxicity

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

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

Not regulated.

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

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

Issue date 05/15/2019

Reviewed on 05/15/2019

Trade name: EP-CLEARSEAL Component B

International Inventories

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

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

16. Other information

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

Date of preparation / last revision 05/15/2019

Abbreviations and acronyms:

- ACGIH: American Conference of Governmental Industrial Hygienists
- AICS: Australian Inventory of Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- DOT: US Department of Transportation
- DSL: Domestic Substances List
- ECL: Existing Chemicals List
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances
- ENCS: Inventory of Existing and New Chemical Substances
- HMIS: Hazardous Materials Identification System (USA)
- IATA: International Air Transport Association
- IECSC: Inventory of Existing Chemical Substances in China
- IMDG: International Maritime Code for Dangerous Goods
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- NDSL: Non-Domestic Substances List
- NFPA: National Fire Protection Association (USA)
- NIOSH: National Institute for Occupational Safety and Health
- OSHA: Occupational Safety & Health Administration
- PEL: Permissible Exposure Limit
- PICCS: Philippine Inventory of Chemicals and Chemical Substances
- TCSI: Taiwan Chemical Substance Inventory
- TLV: Threshold Limit Value
- TSCA: Toxic Substances Control Act Inventory
- VOC: Volatile Organic Compounds (USA, EU)

HMIS® ratings

Health: 3*
 Flammability: 1
 Physical hazard: 0

NFPA ratings

Health: 3
 Flammability: 1
 Instability: 0

