

Safety Data Sheet



Epoxy Grout – PART A

1. IDENTIFICATION

24 HOUR EMERGENCY ASSISTANCE	MANUFACTURER/GENERAL MSDS ASSISTANCE
CHEM-TEL 1-800-255-3924	ONYX CONCRETE COATINGS Tel.: (714)-572-6723 1610 E. Miraloma Ave. Placentia, CA 92870

PRODUCT IDENTIFIER/NAME: Epoxy Grout – PART A

RECOMMENDED USE: Chemical intermediate for epoxy

2. HAZARD(S) IDENTIFICATION

HAZARD CLASSIFICATION:

Acute Oral Toxicity Category 5
Skin Irritation Category 2
Skin Sensitizer Category 1
Germ Cell Mutagenicity Category 2

NFPA ratings (scale 0 – 4):

HEALTH	1
FIRE	1
REACTIVITY	0
SPECIAL	-

NFPA HAZARD RATING:

4= EXTREME 2= MODERATE 0= INSIGNIFICANT
3= HIGH 1= SLIGHT



HAZARD PICTOGRAMS:

SIGNAL WORD: Warning

PHYSICAL APPEARANCE: Milky gray or colored liquid with faint epoxy odor

HAZARD STATEMENTS:

EYE: Minor transient irritation. No corneal injury likely.

SKIN CONTACT: May cause allergic skin reaction in susceptible individuals. Prolonged exposure not likely to cause significant skin irritation. Repeated exposure may cause skin irritation.

SKIN ABSORPTION: A single prolonged exposure is not likely to result in the material being absorbed through skin in harmful amounts. The LD₅₀ for skin absorption in rabbits is 20,000 mg/kg.

INGESTION: Low acute oral toxicity; LD₅₀ (rat) greater than 4000 mg/kg. No hazards anticipated from ingestion incidental to industrial exposure.

INHALATION: Vapors are unlikely due to physical properties. Not a problem unless heated to high temperature.

SYSTEMIC AND OTHER EFFECTS: Except for skin sensitization, repeated exposures to low molecular weight epoxy resins of this type are not anticipated to cause any significant adverse effects. A poorly characterized sample of low molecular weight epoxy resin of this type has been reported to produce skin cancer in a highly sensitive strain of mice. However, high levels of impurities compromise the validity of the findings. Epoxy resin that is representative of current manufacturing processes is not believed to be a cancer hazard to humans. Results of mutagenicity tests in animals have been negative. Has been shown to be negative in some in vitro mutagenicity tests and positive in others.

PRECAUTIONARY STATEMENTS: Use personal protective equipment as required to minimize repeated skin exposure. Wash thoroughly after handling. If skin irritation or rash occurs: Wash with plenty of soap and water and avoid repeated exposure. IF ON SKIN: Wash with plenty of soap and water.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<i>Reaction products of Epichlorohydrin and Bisphenol A</i>	(CAS 25085-99-8)	> 90%
<i>Alkyl Glycidyl Ether</i>	(CAS 68609-97-2)	>10%

This document is prepared pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200). In addition, other substances not Hazardous per this OSHA Standard may be listed. Where proprietary Ingredient shows, the identity may be made available as provided in this standard.

4. FIRST AID MEASURES

EYES: Irrigation of the eye immediately with water for fifteen minutes is a good safety practice.

SKIN: Contact will probably cause no more than irritation. Wash off in flowing water or shower. Wash clothing before reuse.

INGESTION: Low in toxicity. No adverse effects anticipated by this route of exposure incidental to proper industrial handling.

INHALATION: Remove to fresh air if effect occurs. Consult medical personnel.

NOTE TO PHYSICIAN: No specific antidote. Supportive care. Treatment based on judgment of the physician in response to reactions of the patient.

5. FIRE-FIGHTING MEASURES

FLASH POINT: 245°F

METHOD USED: PMCC

FLAMMABLE LIMITS

LFL: Not applicable

UFL: Not applicable

EXTINGUISHING MEDIA: Foam, CO₂, dry chemical

FIRE AND EXPLOSION HAZARDS: None.

FIRE-FIGHTING EQUIPMENT: Wear positive pressure SCBA.

6. ACCIDENTAL RELEASE MEASURES

ACTION TO TAKE FOR SPILLS/LEAKS: Large spill -- dike up and pump into appropriate containers. Small spill -- use noncombustible absorbent material/sand and shovel into suitable containers.

DISPOSAL METHOD: Large quantities should be recovered. Collect small quantities in waste metal drums and seal for removal to an approved landfill, or incinerate in accordance with local, state, and federal regulations.

7. HANDLING AND STORAGE

SPECIAL PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Practice good caution and personnel cleanliness to avoid skin and eye contact. Avoid breathing vapors of heated material.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

VENTILATION: Good room ventilation usually adequate for most operations.

RESPIRATORY PROTECTION: None normally needed.

SKIN PROTECTION: For brief contact, no precautions other than clean body-covering clothing should be needed. Use impervious gloves when prolonged or frequently repeated contact could occur.

EYE PROTECTION: Use chemical goggles.

9. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT: Not applicable

VAP PRESS: Not applicable

VAP DENSITY: Not applicable

SOL. IN WATER: None

SP. GRAVITY: 1.12-1.14

APPEARANCE: Straw colored liquid.

ODOR: Faint epoxy odor

10. STABILITY AND REACTIVITY

STABILITY: (CONDITIONS TO AVOID) Excess heating over long periods of time degrade the resin.

INCOMPATIBILITY: (SPECIFIC MATERIALS TO AVOID) Base.

HAZARDOUS DECOMPOSITION PRODUCTS: The by-products expected in incomplete pyrolysis or combustion of epoxy resins is mainly phenolics, carbon monoxide and water. The thermal decomposition products of epoxy resins therefore should be treated as potentially hazardous substances, and appropriate precautions should be taken.

HAZARDOUS POLYMERIZATION: Will not occur by itself but masses more than 1 pound of product plus aliphatic amine will cause irreversible polymerization with considerable heat buildup.

11. TOXICOLOGICAL INFORMATION

No Data Available

12. ECOLOGICAL INFORMATION

Ecotoxicity: No Data Available

Environmental Fate: No Data Available

Bioaccumulation: No Data Available

Biodegradation: No Date Available

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Large quantities should be recovered. Collect small quantities in waste metal drums and seal for removal to an approved landfill, or incinerate in accordance with local, state, and federal regulations.

14. TRANSPORT INFORMATION

Transportation Emergency Number: 1-800-255-3924 CHEM-TEL.

D.O.T. Shipping Name: Not Regulated by D.O.T.

15. REGULATORY INFORMATION

STATUS ON SUBSTANCE LISTS:

The concentrations shown in this document are maximum or ceiling levels (expressed in weight %, unless otherwise specified) to be used for regulations. Trade Secrets are indicated by "TS".

SUPERFUND AMENDMENTS and REAUTHORIZATION ACT of 1986 (SARA) TITLE III:

Sections 301-304 require emergency planning based on Threshold Planning Quantities (TPQs) and release reporting based on Reportable Quantities (RQs) in 40 CFR 355. Components present in this product at a level which could require reporting under this statute are:

Chemical Name	CAS Number	% By Weight
NONE		

Sections 311-312 require products be reviewed and applicable EPA Hazard Definitions be identified and made known.

EPA HAZARD CLASSIFICATIONS:

Acute Hazard	Chronic Hazard	Fire Hazard	Pressure Hazard	Reactive Hazard
No	No	No	No	No

Section 313 requires submission of annual reports of release of toxic chemicals that appear in 40 CFR 372 (for SARA 313). This information must be included in all MSDSs that are copied and distributed for this material. Components present in this product at level which could require reporting under the statute are:

Chemical Name	CAS Number	% By Weight
NONE		

If you are unsure if you must report more information, call the EPA Emergency Planning and Right-To-Know Hot Line: 800-535-0202 or 202-479-2449.

TOXIC SUBSTANCES CONTROL ACT (TSCA):

The components of this product are contained on the chemical substance inventory list.

16. OTHER INFORMATION

Date Revised: 05/06/2015

MANUFACTURER'S NAME AND ADDRESS:

ONYX CONCRETE COATINGS

1610 E. Miraloma Ave.

Placentia, CA 92870

Telephone: 714-572-6723

The information herein is given in good faith, but no warranty expressed or implied is made. Onyx Concrete Coatings urges users of this product to evaluate its suitability and compliance with local regulations as Onyx cannot foresee the nature of the final application nor final location of usage.

Safety Data Sheet



Epoxy Grout – PART B

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

24 HOUR EMERGENCY ASSISTANCE	MANUFACTURER/GENERAL MSDS ASSISTANCE
CHEM-TEL 1-800-255-3924	ONYX CONCRETE COATINGS Tel.: (714)-572-6723 1610 E. Miraloma Ave. Placentia, CA 92870

PRODUCT IDENTIFIER/NAME: Epoxy Grout – PART B
RECOMMENDED USE: Curing agent for epoxy

2 Hazards identification

2.1 Classification of the substance or mixture:

In compliance with EC regulation No. 1272/2008, 29CFR1910/1200 and GHS Rev. 3 and amendments.

- Acute toxicity (inhalation), category 3.
- Skin corrosion, category 1B.
- Serious eye damage, category 1.
- Skin sensitization, category 1.
- Reproductive toxicity, category 2.
- Chronic aquatic hazard, category 2.

NFPA ratings (scale 0 – 4):

HEALTH	2
FIRE	1
REACTIVITY	0
SPECIAL	-

NFPA HAZARD RATING:

4= EXTREME 3= HIGH 2= MODERATE 1= SLIGHT 0= INSIGNIFICANT

Hazard-determining components of labeling:

- 1,2-Ethanediamine, N1-(2-aminoethyl)-
- Bisphenol A
- 1,2-Ethanediamine, N1-(2-aminoethyl)-N2-[2-[(2-aminoethyl) amino] ethyl]-
- Amidoamine
- Polyamide Polymer

2.2 Label elements

Hazard pictograms:



Signal word: Danger

Hazard statements:

- H314 Causes severe skin burns and eye damage.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H331 Toxic if inhaled.
- H361 Suspected of damaging fertility or the unborn child.
- H411 Toxic to aquatic life with long lasting effects.

Precautionary statements:

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P260 Do not breathe dust/fume/gas/mist/vapors/spray.
- P264 Wash skin thoroughly after handling.
- P271 Use only outdoors or in a well-ventilated area.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P284 Wear respiratory protection.
- P301+P330+P331+P310 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.
- P302+P352 If on skin: Wash with soap and water.
- P303+P361+P353+P310 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.
- P304+P340+P310 If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.
- P305+P351+P338+P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
- P308+P313 If exposed or concerned: Get medical advice/attention.
- P320 Specific treatment is urgent (see ... on this label).
- P333+P313 If skin irritation or a rash occurs: Get medical advice/attention.
- P363 Wash contaminated clothing before reuse.
- P391 Collect spillage.
- P403+P233 Store in a well-ventilated place. Keep container tightly closed.
- P405 Store locked up.
- P501 Dispose of contents and container as instructed in Section 13.

2.3 Other hazards: None known

Information concerning particular hazards for humans and environment:

The product has to be labeled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Classification system:

The classification is according to EC regulation No. 1272/2008, 29CFR1910/1200 and GHS Rev. 3 and amendments, and extended by company and literature data. The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.

3 Composition/information on ingredients

3.1 Substance: Not applicable

3.2 Mixture:

Identification	Name	Classification according to Regulation (EC) No1278/2008 (CLP)	Weight %

CAS number: 112-57-2	1,2-Ethanediamine, N1-(2-aminoethyl)-N2-[2-[(2-aminoethyl) amino] ethyl]-	Acute Tox. 4; H302 Acute Tox. 4; H312 Skin Sens. 1; H317 Skin Corr. 1B; H314 Aquatic Chronic 2; H411	1-5
CAS number: 111-40-0	1,2-Ethanediamine, N1-(2-aminoethyl)-	Acute Tox. 4; H302 Acute Tox. 4; H312 Skin Sens. 1; H317 Skin Corr. 1B; H314	5-15
CAS number: Trade Secret	Polyamide Polymer	Acute Tox. 4; H302 Skin Corr. 1B; H314 Stot SE 3; H335	5-15
CAS number: 80-05-7	Bisphenol A	Skin Sens. 1; H317 Eye Dam. 1; H318 Stot SE 3; H335 Repr. 2; H361	5-15
CAS number: Trade Secret	Amidoamine	Skin Sens. 1; H317 Skin Corr. 1B; H314 Eye Dam. 1; H318 Aquatic Chronic 2; H411	50-70

Additional information:

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of the OSHA Hazard Communication Standard (29 CFR §1910.1200).

Full Text of H and EUH statements: See section 16

4 First aid measures

4.1 Description of first aid measures

General information:

First responders should wear gloves and other self-protection when performing treatment.

After inhalation:

- Take precautions to ensure your own safety.
- Remove source of exposure or move person to fresh air and keep comfortable for breathing.
- Immediately call a POISON CONTROL CENTER or seek medical attention.
- If breathing has stopped, trained personnel should begin rescue breathing.
- Avoid mouth-to-mouth contact by using a barrier device.
- If the heart has stopped, immediately start cardiopulmonary resuscitation (CPR).

After skin contact:

- Immediately call a POISON CONTROL CENTER or seek medical attention.
- Avoid direct contact and wear chemical protective clothing, if necessary.
- Immediately take off all contaminated clothing.
- Wash with plenty of water / soap and rinse thoroughly until medical aid is available.
- Gently blot or brush away excess product.
- Wash contaminated clothing before re-use or discard.

After eye contact:

- Get medical advice/attention.
- Avoid direct contact and wear chemical protective gloves, if necessary.
- Rinse cautiously with water for several minutes.
- Remove contact lenses, if present and easy to do. Continue rinsing.

After swallowing:

- Immediately call a POISON CONTROL CENTER or seek medical attention.
- Rinse mouth and do not induce vomiting.

If breathing has stopped, trained personnel should begin rescue breathing.
Avoid mouth-to-mouth contact by using supplied air / barrier device.
If the heart has stopped, immediately start cardiopulmonary resuscitation (CPR).

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

None

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

No additional information.

5 Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media:

Use Water (fog only), dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam.

Unsuitable extinguishing media:

Do not use water stream, as this may spread fire.

5.2 Special hazards arising from the substance or mixture:

Thermal decomposition can lead to release of irritating gases and vapors.

5.3 Advice for

firefighters Protective equipment:

Use typical firefighting equipment, self-contained breathing apparatus, special tightly sealed suit.

5.4 Additional information: None

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Wear recommended personal protective equipment.

Ensure adequate ventilation.

Ensure air handling systems are operational.

6.2 Environmental precautions:

Should not be released into the environment.

Prevent from reaching drains, sewer or waterway.

6.3 Methods and material for containment and cleaning up:

Wear protective eye wear, gloves and clothing.

Absorb with non-combustible liquid-binding material (sand, diatomaceous earth (clay), acid binders, universal binders).

Dispose of contents / container in accordance with local regulations.

6.4 Reference to other sections: None

7 Handling and storage

7.1 Precautions for safe handling:

Use appropriate personal protective equipment (see Section 8).

Use only with adequate ventilation.

Avoid breathing mist or vapor.

Do not eat, drink, smoke or use personal products when handling chemical substances.

Wash thoroughly after handling.

Do not get in eyes, on skin, or on clothing.

7.2 Conditions for safe storage, including any incompatibilities:

Store in a cool, well-ventilated area.

Protect from freezing and physical damage.

Keep container tightly sealed.

Hold bulk storage under a nitrogen blanket.

7.3 Specific end use(s): No additional information.

8 Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure limit values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
NIOSH	1,2-Ethanediamine, N1-(2-aminoethyl)-	111-40-0	NIOSH TWA 1.0 ppm 4.0 mg/m ³
ACGIH	1,2-Ethanediamine, N1-(2-aminoethyl)-	111-40-0	ACGIH TWA: 1.0 ppm
WEEL	1,2-Ethanediamine, N1-(2-aminoethyl)-N2-[2- [(2-aminoethyl) amino] ethyl]-	112-57-2	WEEL TWA 5.0 mg/m ³

Biological limit value:

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

Derived No Effect Level (DNEL):

Not determined or not applicable.

Predicted No Effect Concentration (PNEC):

Not determined or not applicable.

Information on monitoring procedures:

Not determined or not applicable.

8.2 Exposure controls

Appropriate engineering controls:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

Personal protection equipment

Eye and face protection:

Wear chemical splash goggles and face shield when eye and face contact is possible due to splashing or spraying of material.

Skin and body protection:

Select glove material impermeable and resistant to the substance.

Suitable gloves can be recommended by supplier.

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, use a NIOSH-approved respirator.

General hygienic measures:

Wash hands before breaks and at the end of work.

Avoid contact with skin, eyes and clothing.

Wash contaminated clothing before reusing.

Environmental exposure controls:

Select controls based on a risk assessment of local conditions.

See section 6 for information on accidental release measures.

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance (physical state, color):	Liquid, clear amber	Explosion limit lower: Explosion limit upper:	Not determined or not available. Not determined or not available.
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Odor:	ammonia like	Vapor pressure:	Not determined or not available.
Odor threshold:	Not determined or not available.	Vapor density:	Not determined or not available.
pH-value:	Not determined or not available.	Relative density:	Not determined or not available.
Melting/Freezing point:	Not determined or not available.	Solubilities:	Low solubility in water.
Boiling point/range:	Not determined or not available.	Partition coefficient (n-octanol/water):	Not determined or not available.
Flash point (closed cup):	93.3 °C	Auto/Self-ignition temperature:	Not determined or not available.
Evaporation rate:	Not determined or not available.	Decomposition temperature:	Not determined or not available.
Flammability (solid, gaseous):	Not determined or not available.	Dynamic viscosity:	Not determined or not available.
Density:	Not determined or not available.	Kinematic viscosity:	Not determined or not available.

10 Stability and reactivity

10.1 Reactivity: Does not react under normal conditions of use and storage.

10.2 Chemical stability: Stable under normal conditions of use and storage.

10.3 Possibility of hazardous reactions: None under normal conditions of use and storage.

10.4 Conditions to avoid: None known.

10.5 Incompatible materials:

Strong oxidizing agents.

Alkalis.

10.6 Hazardous decomposition products:

Carbon monoxide, Carbon dioxide, Nitrogen oxides.

11 Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Assessment: Toxic if inhaled

Product data: No data available.

Substance data:

Name	Route	Result
1,2-Ethanediamine, N1-(2- aminoethyl)-	oral	LD50 - Rat - 1,080 mg/kg
	dermal	LD50 - Rabbit - 1,090 mg/kg
Polyamide Polymer	oral	LD50 - Rat - 540 mg/kg

Skin corrosion/irritation

Assessment: Causes severe skin burns and eye damage

Product data: No data available.

Substance data:

Name	Result
1,2-Ethanediamine, N1-(2- aminoethyl)-	Corrosive to the skin.

1,2-Ethanediamine, N1-(2-aminoethyl)-N2-[2-[(2-aminoethyl) amino] ethyl]-	Corrosive to the skin.
Amidoamine	Corrosive to the skin.

Serious eye damage/irritation

Assessment: Causes serious eye damage

Product data: No data available.

Substance data:

Name	Result
Polyamide Polymer	Corrosive effect on the eyes.
Bisphenol A	Corrosive effect on the eyes.
Amidoamine	Corrosive effect on the eyes.

Respiratory or skin sensitization

Assessment: May cause an allergic skin reaction

Product data: No data available.

Substance data:

Name	Result
1,2-Ethanediamine, N1-(2-aminoethyl)-	Sensitization possible through skin contact.
Bisphenol A	Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.
1,2-Ethanediamine, N1-(2-aminoethyl)-N2-[2-[(2-aminoethyl) amino] ethyl]-	Sensitization possible through skin contact.
Amidoamine	Sensitization possible through skin contact.

Carcinogenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

International Agency for Research on Cancer (IARC): None of the ingredients are listed.

National Toxicology Program (NTP): None of the ingredients are listed.

Germ cell mutagenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Reproductive Toxicity

Assessment: Suspected of damaging fertility or the unborn child

Product data: No data available.

Substance data:

Name	Result
Bisphenol A	Suspected of damaging fertility or the unborn child

Specific target organ toxicity (single exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

Name	Result
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Polyamide Polymer	Component affects the respiratory system.
Bisphenol A	Component affects the respiratory system.

Specific target organ toxicity (repeated exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Aspiration toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Information on likely routes of exposure: No data available.

Symptoms related to the physical, chemical and toxicological characteristics: No data available.

Other information: No data available.

12 Ecological information

12.1 Toxicity

Acute (short-term) toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Chronic (long-term) toxicity

Assessment: Toxic to aquatic life with long lasting effects

Product data: No data available.

Substance data: No data available.

12.2 Persistence and degradability

Product data: No data available.

Substance data: No data available.

12.3 Bioaccumulative potential

Product data: No data available.

Substance data: No data available.

12.4 Mobility in soil

Product data: No data available.

Substance data: No data available.

12.5 Results of PBT and vPvB assessment

PBT assessment: This product does not contain any substances that are assessed to be a PBT.

vPvB assessment: This product does not contain any substances that are assessed to be a vPvB.

12.6 Other adverse effects:

No data available.

13 Disposal considerations



13.1 Waste treatment methods

Relevant information:



It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory agencies.

14 Transport information



United States Transportation of dangerous goods (49 CFR DOT)

14. UN number 1	2735
14. UN proper shipping name 2	Amines, Liquid, Corrosive, N.O.S. (Tetraethylenepentamine, Diethylenetriamine)
14. UN transport hazard class(es) 3	8  
14. Packing group 4	III
14. Environmental hazards 5	Marine Pollutant Amidoamine, 1,2-Ethanediamine, N1-(2-aminoethyl)-N2-[2-[(2-aminoethyl) amino] ethyl]-
14. Special precautions for user 6	None



International Carriage of Dangerous Goods by Road/Rail (ADR/RID)

14. UN number 1	2735
14. UN proper shipping name 2	Amines, Liquid, Corrosive, N.O.S. (Tetraethylenepentamine, Diethylenetriamine)
14. UN transport hazard class(es) 3	8  
14. Packing group 4	III
14. Environmental hazards 5	Marine Pollutant Amidoamine, 1,2-Ethanediamine, N1-(2-aminoethyl)-N2-[2-[(2-aminoethyl) amino] ethyl]-
14. Special precautions for user 6	None

International Carriage of Dangerous Goods by Inland Waterways (ADN)



14. UN number 1	UN2735
14. UN proper shipping name 2	UN2735, Amines, Liquid, Corrosive, N.O.S. (Tetraethylenepentamine, Diethylenetriamine), 8, III
14. UN transport hazard class(es) 3	8  
14. Packing group 4	III
14. Environmental hazards 5	Marine Pollutant
14. Special precautions for user 6	None

International Maritime Dangerous Goods (IMDG)

14. UN number 1	2735
14. UN proper shipping name 2	Amines, Liquid, Corrosive, N.O.S. (Tetraethylenepentamine, Diethylenetriamine)
14. UN transport hazard class(es) 3	8  
14. Packing group 4	III

14. Environmental hazards 5	Marine Pollutant Amidoamine, 1,2-Ethanediamine, N1-(2-aminoethyl)-N2-[2-[(2-aminoethyl) amino] ethyl]-
14. Special precautions for user 6	None

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

14. UN number 1	2735
14. UN proper shipping name 2	Amines, Liquid, Corrosive, N.O.S. (Tetraethylenepentamine, Diethylenetriamine)
14. UN transport hazard class(es) 3	8  
14. Packing group 4	III
14. Environmental hazards 5	Marine Pollutant Amidoamine, 1,2-Ethanediamine, N1-(2-aminoethyl)-N2-[2-[(2-aminoethyl) amino] ethyl]-
14. Special precautions for user 6	None

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	
Bulk Name	None
Ship type	None
Pollution category	None

15 Regulatory information

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

United States regulations

Inventory listing (TSCA): All ingredients are listed.

Significant New Use Rule (TSCA Section 5): Not listed

Export notification under TSCA Section 12(b): Not listed

SARA Section 311/312 (Specific toxic chemical listings)

Acute	Chronic	Fire	Pressure	Reactive
Yes	Yes	No	No	No

SARA Section 302 extremely hazardous substances: Not listed

SARA Section 313 (specific toxic chemical listings):

80-05-7	Bisphenol A	Listed
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CERCLA: Not listed

RCRA: Not listed

Section 112(r) of the Clean Air Act (CAA): Not listed

Massachusetts Right to Know: Not listed

New Jersey Right to Know: Not listed

New York Right to Know: Not listed

Pennsylvania Right to Know: Not listed

California Proposition 65: Not listed

European regulations

Inventory listing (EINECS): Not

determined. **REACH SVHC candidate list:**

Not listed **REACH SVHC Authorizations:**
Not listed **REACH Restriction:** Not listed
Water hazard class (WGK): Not determined.

Canada regulations

Domestic substances list (DSL): All ingredients are listed.
Non-domestic substances list (NDSL): Not listed

China regulations

Inventory of Existing Chemical Substances in China (IECSC): All ingredients are listed.
Inventory of Prohibited Chemicals: Not listed
Catalog of Hazardous Chemicals: Not listed
List of Toxic Chemicals Restricted to be Imported and Export in China: Not listed
List of Hazardous Chemicals for Priority Management - SAWS: Not listed
The Catalog of Priority Hazardous Chemicals for Environment Management (PHCs)-MEP: Not listed

Australia regulations

Australian Inventory of Chemical Substances (AICS): All ingredients are listed.

Japan regulations

Existing and New Chemical Substances (ENCS): One or more ingredients are not listed.
Industrial Safety and Health Law (ISHL): Not determined.

Korea regulations

Korea Existing Chemicals List (KECL): All ingredients are listed.

New Zealand regulations

New Zealand Inventory of Chemicals (NZIoC): All ingredients are listed.

Philippine regulations

Philippine Inventory of Chemicals and Chemical Substances (PICCS): All ingredients are listed.

Taiwan regulations

Taiwan Chemical Substance Inventory (TCSI): All ingredients are listed.

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

16 Other information

Indication of changes:

Not applicable.

Abbreviations and Acronyms: None

Summary of classification in section 3:

Acute Tox. 4; H302	Acute toxicity (oral), category 4
Acute Tox. 4; H312	Acute toxicity (dermal), category 4
Skin Sens. 1; H317	Skin sensitization, category 1
Skin Corr. 1B; H314	Skin corrosion, category 1B
Aquatic Chronic 2; H411	Chronic aquatic hazard, category 2
Stot SE 3; H335	Specific target organ toxicity - single exposure, category 3, respiratory irritation
Eye Dam. 1; H318	Serious eye damage, category 1
Repr. 2; H361	Reproductive toxicity, category 2

Summary of hazard statements in section 3:

H302	Harmful if swallowed
H312	Harmful in contact with skin
H317	May cause an allergic skin reaction
H314	Causes severe skin burns and eye damage

H411	Toxic to aquatic life with long lasting effects
H335	May cause respiratory irritation
H318	Causes serious eye damage
H361	Suspected of damaging fertility or the unborn child

Disclaimer:

This product has been classified in accordance within GHS guidelines. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal 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, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

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End of Safety Data Sheet