



MATERIAL SAFETY DATA SHEET EPOXY-COAT PART A

1. PRODUCT AND COMPANY IDENTIFICATION

Material Identification

Product ID: 151402

Product Name: Epoxy-Coat Part A

Company Identification

Epoxy-Coat

169 Gratiot

Mt. Clemens, MI 48043

Manufacturer's Phone: 1-800-841-5580

24-Hour Medical Emergency: 1-800-424-9300

Phone: 1-800- Chem Tec

2. INGREDIENTS

Ingredient	CAS No.	% by WT. Range	Exposure Limits
Epoxy-Coat Part A	25068-38-6	100	Not Established

Key:

(PEL): OSHA

(TLV): OSHA & ACGIH

(STEL): ACGIH

CAS: Chemical Abstracts Registry Number

IDLH: Immediate Danger to Life and Health

3. HEALTH HAZARD DATA

Physical Appearance: Clear viscous liquid

Emergency Overview: Can cause irritation of eyes and skin. May cause Skin sensitization. Contact with hot material can cause thermal burns. Vapors of hot material can cause irritation of respiratory passages.

Exposure limits: See Section 2

Routes of Entry: Inhalation → x Skin → x Ingestion → x

Effects of overexposure:

- Acute:**
- Eye -** Mildly irritating; contact with hot material can cause Thermal burns resulting in permanent damage.
 - Skin -** Skin sensitization (Allergy) may be evidenced by rashes, Especially hives
 - Inhalation -** Exposure to vapors or mists are moderately irritating to Respiratory passages.
 - Ingestion -** Not likely to be a relevant rout of exposure.

Chronic: N/A

Medical Conditions Aggravated by Exposure: Pre-existing skin and eye disorders may be aggravated by exposure to this product. Pre-existing skin or lung allergies may increase the chance of developing increased allergy symptoms from exposure to this product.

4. FIRST AID MEASURES

Emergency and First Aid Procedures

- Inhalation:** Remove from exposure, restore breathing. Keep warm and quiet. Notify physician
- Eyes (splash):** Immediately flush eyes with water for 15 minutes. Hold eyelids open for complete irrigation. Rest eyes for 30 minutes, if redness, burning, blurred vision or swelling persist take to a physician.
- Skin (splash):** Wash affected area with soap and water. Remove contaminated clothing. Consult a physician if irritation persists. Do not reuse clothing until cleaned. Contaminated leather articles, including shoes can not be decontaminated and should be destroyed to prevent reuse. If contact with a hot product occurs, immediately flush with cool water for 15 minutes and carefully remove clothing. If clothing is stuck to a burn area, do not pull it off, but cut around it. Cover a burn with clean material and get medical attention immediately.
- Ingestion:** Do not induce vomiting. Have victim rinse out mouth with water, drink sips of water to remove taste from mouth. Consult a physician or poison control center, treat symptomatically.

5. FIRE AND EXPLOSION HAZARD DATA

- Flash Point:** 480° F PM
- LEL %:** N/A
- UEL %:** N/A
- Extinguishing Media Foam:** CO2
Dry chemical
Water fog
Other

Special Fire Fighting Procedures: Material will not burn unless preheated. Clear fire area of all non emergency personnel. Shut off source. Water fog may be used to cool closed containers exposed to extreme heat to prevent pressure build up and possible auto ignition or explosion. Wear NIOSH approved positive pressure self contained breathing apparatus and full bunker gear for confined spaces.

Unusual Fire and Explosion Hazards: Keep containers tightly closed. Combustible liquid; isolate from all sources of ignition. Closed containers may explode to extreme heat.

6. ACCIDENTAL RELEASE MEASURES

Steps to be taken in case material is released or spilled:

Shut off valves, contain spill, and keep out of water sources and sewers, for small spills add non-flammable absorbent in spill area. Place saturated absorbent in an approved container for disposal. Remove contaminated soil to remove contaminated trace residues. For large spills, remove with vacuum trucks or pump to storage/salvage vessels. Then soak up residue with an absorbent such as clay, sand or other suitable material. Place in non leaking containers. Flush area with water to remove trace residue. Minimize breathing vapors and skin contact, ventilate confined area, open all windows and doors, assure conformity with applicable government regulations. Keep all nonessential people away.

7. HANDLING AND STORAGE

Store large quantities only in buildings designed to comply with *OSHA 1910.106*. Keep containers tight and upright to prevent leakage. Do not store with incompatible materials. Keep containers closed when not in use. Keep away from open flames and high temperatures.

Do not take internally. Avoid prolonged or repeated contact with skin, eyes, and clothing. Wash thoroughly after handling. This resin may be handled, shipped and stored at elevated temperature in bulk. The recommended pumping temperature is 180° F. Containers should be bonded and grounded when pouring. Empty containers release residue and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill or expose such containers to heat, sparks, static electricity or other sources of ignition. Do not attempt to clean. "Empty" drums should be completely drained, properly bunged and promptly returned to a drum reconditioner.

Avoid breathing vapors in top of shipping container. To prevent thermal burns avoid contact with hot product. Use with adequate ventilation. Use non-sparking tools to open or close containers.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Respiratory Protection:	No respiratory protection is usually required under normal conditions of use.
Ventilation:	Provide general dilution or local exhaust ventilation In volume and pattern to keep concentrations within Permitted exposure limits. All areas should be ventilated in accordance with OSHA Regulation 29 CFR Part 1910
Protective Gloves:	Butyl Rubber chemical resistant gloves.
Eye Protection:	Use safety eyewear with splash guards or face shield.
Other Protective Clothing or Equipment:	Use chemical resistant apron or other impervious clothing. Remove and wash contaminated clothing before reuse. Shower and eyewash should be easily accessible to the work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear viscous liquid
Odor:	N/A
Boiling Range (° F):	500
Solubility in water:	Negligible
Vapor Density (air – 1):	N/A
Evaporation Rate (Butyl Acetate – 1):	N/A
Vapor Pressure:	0.03 mbar@77° C
Specific Gravity:	1.17
Stability:	Stable
Conditions to avoid:	Avoid high temperatures. Reaction with some curing agents may produce considerable heat. Run-a-way cure reactions may char and decompose the resin system.
Incompatibility (Materials to Avoid):	Can react vigorously with strong oxidizing agents, strong Lewis or mineral acids, and strong mineral and organic bases. Especially primary and secondary aliphatic amines. Do not allow molten product to contact water or other liquids. This can cause violent eruptions, splatter hot material, or ignite flammable material.
Hazardous decomposition products:	Fumes, smoke, carbon monoxide, aldehydes and other decomposition products where combustion products where combustion is not complete. Decomposition and combustion products may be toxic.
Hazardous Polymerization:	Will not occur

11. TOXICITY DATA

The effects of overexposure shown in section 2 are based on acute toxicity profiles. Typical values are:

Ingredient	Oral LD50(Rat)	Skin LD50(Rabbit)	Inhalation LC50
Epoxy-Coat Part A	2000 mg/kg	<2000 mg/kg	

This product has not been classified by IARC. Recent 2-year bioassays in rats and mice exposed by the dermal route to the diglycidyl ether of bisphenol. A yielded no evidence of carcinogenicity to the skin or any other organ. These resins have shown activity in vitro microbial mutagenicity screening and have produced chromosomal aberrations in cultured rat liver cells. The significance of these tests to man is unknown.

12. ECOLOGICAL INFORMATION

Ecotoxicity: Toxicity to fish LC50: Specie: Forelle, Dose: 2.4 mg/L 96hour; EC50: Specie: Daphnia magna staus, Dose 3.6 mg/L 24hour

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: Hazard characteristic and regulatory waste stream classification can change with product use. Accordingly it is the responsibility of the user to determine the proper storage, transportation, treatment and or disposal methodologies for spent materials and residues at time of disposition. Dispose in accordance with all applicable disposal regulations. Incinerate under controlled conditions in a permitted facility.

14. TRANSPORT INFORMATION

DOT Shipping Name: Not DOT Regulated

DOT Hazard Classification:

DOT Label Codes:

DOT ID Number:

DOT Package Code:

Emergency Response Guide:

Marine Pollutant:

15. REGULATORY INFORMATION

(RQ) Reportable Quantity: CERCLA

Sara 302: No TPQ

Sara 313: No de minimis concentration

Sara Section 311 List Hazards:

- (a) Immediate Acute Health: N/A
- (b) Delayed Chronic Health: Yes
- (c) Fire: N/A
- (d) Reactive: N/A
- (e) Sudden Release of Pressure: N/A

Components not listed in section 2:

Phenyl Glycidyl Ether at <6ppm under California Safe Drinking Water & Toxic Enforcement Act was listed Oct. 1, 1990 as carcinogenic.

MATERIAL SAFETY DATA SHEET

EPOXY-COAT PART B

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Information

Trade name: Epoxy Coat Part B

Product code: RA038

Manufacturer,Importer, supplier: EPOXY-COAT
169 N. Gratiot
Mt. Clemens, MI 48043
800.841.5580

Emergency telephone Number: CHEMTREC US Domestic (800) 424-9300
CHEMTREC International (703) 527-3887

2. HAZARDS IDENTIFICATION

Emergency Overview

Human health hazards: Product is toxic and harmful if inhaled. May be moderately toxic if swallowed. Slightly toxic and may be harmful if absorbed through the skin. May be corrosive to the eyes. May be corrosive to the skin. May be corrosive to respiratory tract. Corrosive to mouth, throat, and stomach. May produce CNS depression. May cause skin sensitization.

Safety hazards: Corrosive. Material will not burn unless preheated.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS – No.	Weight %
Cycloaliphatic amine	*	
Proprietary Component	*	
Phenolic Compound	*	

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

4. FIRST AID MEASURES

Inhalation: Do not attempt to rescue the victim unless proper respiratory protection is worn. Remove victim to fresh air and provide oxygen if breathing is difficult. Get medical attention.

Skin contact: Immediately remove contaminated clothing. Flush with large amounts of water for at least 15 minutes. Flush exposed skin with water and follow by washing with soap if available. Transport to nearest medical facility for additional treatment.

Eye contact: Immediately flush eyes with plenty of water for 15 minutes while holding eyelids open. Transport to nearest medical facility for additional treatment.

Ingestion: Do not induce vomiting. Have victim rinse out mouth with water, then drunk sips of water to remove taste from mouth. Do not give liquids to a drowsy, convulsing or unconscious person. If vomiting occurs spontaneously, keep head below hips to

prevent aspiration. Get medical attention.

Notes to physician

Symptoms: Lung damage (scarring, bronchitis, emphysema) may be evidenced by shortness of breath, especially on exertion, and may be accompanied by chronic cough. Repeated skin contact may result in an allergic skin reaction causing itching, burning, redness, and swelling.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing Media: Use water fog, "alcohol foam", dry chemical or carbon dioxide.

Water fog may cause frothing which can be violent, especially if sprayed into containers of hot or burning liquid.

Specific hazards during Fire fighting: **DANGER.** Corrosive. Material will not burn unless preheated. Delayed lung damage (pulmonary edema) can be experienced after exposure to combustion products, sometimes hours after the exposure. Nitrogen oxides and other potentially hazardous nitrogen-containing compounds may be released upon combustion.

Evacuate the area of all non-essential personnel. Container areas exposed to direct flame contact should be cooled with large quantities of water as needed to prevent weakening of container structure. Cool fire exposed containers with water.

Special protective equipment For fire-fighters: Do not enter confined fire space without full bunker gear (helmet with face shield, bunker coats, gloves, and rubber boots) including a positive pressure NIOSH approved self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Corrosive.
May burn although not readily ignitable.
Remove ignition sources.
Prevent all bodily contact with spilled materials.
Use cautious judgment when cleaning up large spills.
Shut off leaks, if possible without personal risk.

Environmental precautions: Dike and contain.
Contain run-off and dispose of properly.
Neutralize contaminated area as appropriate for acid or base spill.
Prevent from entering into drains, ditches or rivers.

Clean-up methods – small: Soak up with an absorbent such as clay, sand or other suitable material.
Place in non-leaking container.
Seal tightly for proper disposal.

Clean-up methods – large: Remove with vacuum trucks or pump to storage / salvage vessels.
Soak up residue with an absorbent such as clay, sand, or other suitable material.
Place in non-leaking container.
Seal tightly for proper disposal.

Flush area with water to remove trace residue.

Additional advice: Notify authorities if any exposures to the general public or environment occurs or is likely to occur. See Section 13 for information on disposal.

7. HANDLING AND STORAGE

Handling

Advice on safe handling: Do not get in eyes, on skin or on clothing. Do not taste or swallow. Do not breathe material. Use only with adequate ventilation. Avoid contact with skin, eyes, and clothing. Wash thoroughly after handling. Heating this curing agent above 300 Deg. F in the presence of air may cause slow oxidative decomposition; above 500 Deg. F, polymerization may occur. Some epoxy resins can produce exothermic reactions which in large masses can cause runaway polymerization and charring of the reactants. Fumes and vapors from these thermal and chemical decompositions vary widely in composition and toxicity. DANGER. May be corrosive to the eyes. May be corrosive to the skin. Corrosive to the digestive tract. Toxic and harmful if inhaled. Slightly toxic and may be harmful if absorbed through the skin. May be moderately toxic if swallowed. May be corrosive to the respiratory tract. May cause CNS depression. May cause skin sensitization. Wash with soap and water before eating, drinking, smoking, applying cosmetics, or using toilet facilities. Launder contaminated clothing before reuse. Contaminated leather articles, including shoes, cannot be decontaminated and should be destroyed to prevent reuse. Do not pressurize drum containers to empty them. Do not breathe fumes. Use a NIOSH-approved respirator as required to prevent overexposure. In accord with 29 CFR.1910.134, use either an atmosphere-supplying respirator or an air-purifying respirator for organic vapors. Containers, even those that have been emptied, can contain hazardous product residues.

Storage

Requirements for storage areas and containers: Store in a cool, dry place with adequate ventilation. Keep away from open flames and high temperatures. Keep containers closed when not in use.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Protective measures: Wear appropriate respirator and full-body protective clothing.

Engineering measures: Adequate ventilation to control airborne concentrations. Eye wash fountains and safety showers should be available for emergency use.

Eye Protection: Do not get in eyes.
Wear chemical goggles.

Skin and body protection: Do not get on skin, on clothing.
Wear chemical-resistant protective clothing such as gloves, outer clothing or apron, overshoes and a face-shield suitable to potential exposure.

Respiratory protection: Do not breathe vapors or mists.
Use a NIOSH – approved respirator as required to prevent overexposure. In accord with 29 CFR 1910.143, the types of respirator(s) to be considered include:
Air-Purifying Respirator for Organic Vapors.

Full-Face Supplied-Air Respirator.
 Self-Contained Breathing Apparatus (SCBA) – for use in environments with unknown concentrations or emergency situations.

Exposure Guidelines

Components with workplace control parameters	Regulation	Exposure time	Value	Remarks
Cycloaliphatic amine	ACGIH			None established
Proprietary Component	ACGIH			None established
Phenolic Compound	WEEL	Time Weighted Average (TWA):	10 ppm 44.2 mg/m ³	

9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	Liquid
Color:	Yellow
Odor:	Amine
Flash Point:	> 93.33 °C (>199.99 °F) (Setaflash)
Solubility in water:	Partially soluble

10. STABILITY AND REACTIVITY

Conditions to avoid:	Avoid high temperatures.
Materials to avoid:	Can react vigorously with strong oxidizing agents, strong lewis or mineral acid, and strong mineral and organic bases. Reaction with some resins may produce considerable heat and possible violent decomposition.
Hazardous reactions:	Stable under normal use conditions. Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity:	Expected to be moderately toxic, 400< LD50<= 2000 mg/kg
Acute dermal toxicity:	1<LC50<= 5 mb/l.

Chronic Health Hazard

Components	Concentration	Regulation	Value	Remarks
Cycloaliphatic amine		US. IARC Monographs on		This component has not been

		Occupational Exposures to Chemical Agents		classified by the International Agency for Research on Cancer (IARC)
Proprietary Component		US. IARC Monographs on Occupational Exposures to Chemical Agents		This component has not been classified by the International Agency for Research on Cancer (IARC)
Phenolic Compound		US. IARC Monographs on Occupational Exposures to Chemical Agents		This component has not been classified by the International Agency for Research on Cancer (IARC)

Potential Health Effects

- Inhalation:** Product is toxic and harmful if inhaled.
May be corrosive to the nose, throat and respiratory tract.
Repeated or prolonged exposure can result in lung damage.
May produce CNS depression.
- Skin:** May be corrosive (causing chemical burns) which may result in permanent skin damage.
Slightly toxic and may be harmful if absorbed through the skin.
May cause skin sensitization.
- Eyes:** May be corrosive to the eyes and may cause severe damage, including blindness.
Vapors may be irritating.
- Ingestion:** May be moderately toxic if swallowed.
Corrosive and may cause severe and permanent damage to mouth, throat and stomach. May produce CNS depression.
- Aggravated Medical Condition:** Preexisting eye, skin and respiratory disorders may be aggravated by exposure to this product.

12. ECOLOGICAL INFORMATION

Elimination information (persistence and degradability)

Biodegradability: This section will be updated as ecological reviews are completed.

Ecotoxicity effects

Toxicity to fish: This section will be updated as ecological reviews are completed.

13. DISPOSAL CONSIDERATIONS

Product disposal: If this material becomes a waste material, it would be a corrosive hazardous waste, hazardous waste number D002 (40 CFR 262). Refer to the latest EPA

or state regulations regarding proper disposal.

14. TRANSPORT INFORMATION

DOT:	UN/NA-No	2735
	Class	8
	Packing group	III
	ERG No.	153
	Proper shipping name	POLYAMINES, LIQUID, CORROSIVE, N.O.S., CYCLOALIPHATIC AMINE (UNMODIFIED)
IMDG:	UN-Number	2735
	Class	8
	Packing group	III
	EMS	F-A S-B
	Description of goods Contains	POLYAMINES, LIQUID, CORROSIVE, N.O.S., CYCLOALIPHATIC AMINE (UNMODIFIED)
IATA Cargo	UN-Number	2735
	Class	8
	Packing group	III
	EMS	F-A S-B
	Description of goods Contains	POLYAMINES, LIQUID, CORROSIVE, N.O.S., CYCLOALIPHATIC AMINE (UNMODIFIED)

15. REGULATORY INFORMATION

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

Notification Status

TSCA:	All components listed.
DSL:	All components listed.
EIECS:	All components listed or polymer exempt.
AICS:	All components listed.
ENCS (JP):	All components listed.
INV (CN):	All components listed.
PICCS (PH):	All components listed.
KECI (KR):	All components listed.

US. EPA CERCLA Hazardous Substances (40 CFR 302)

Cycloaliphatic amine:	No RQ
Proprietary Component:	No RQ
Phenolic Compound:	No RQ

SARA 311/312 Hazards

Acute Health Hazard

Chronic Health Hazard

U.S. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) – Supplier Notification Required

Cycloaliphatic amine: No De minimis Concentration

Proprietary Component: No De minimis Concentration

Phenolic Compound: No De minimis Concentration

U.S. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A)

Cycloaliphatic amine: Threshold Planning Quantity: No TPQ

Proprietary Component: Threshold Planning Quantity: No TPQ

Phenolic Compound Threshold Planning Quantity: No TPQ

Cycloaliphatic amine: Reportable quantity: No RQ

Proprietary Component: Reportable quantity: No RQ

Phenolic Compound: Reportable quantity: No RQ

New Jersey Right-To-Know Chemical List

Cycloaliphatic amine: Not Listed

Proprietary Component: Not Listed

Phenolic Compound: Not Listed

Pennsylvania Right-To-Know Chemical List

Cycloaliphatic amine: Not Listed

Proprietary Component: Not Listed

Phenolic Compound: Not Listed

Massachusetts Right-To-Know

Cycloaliphatic amine: Not Listed

Proprietary Component: Not Listed

Phenolic Compound: Not Listed

HMIS Rating: Health: 3

Fire: 1

Reactivity: 0

16. OTHER INFORMATION

Reference: Prepared in accordance with 29 CFR 1910.1200.

The information provided herein was believe by Epoxy-Coat Inc. to be accurate at the time of preparation or prepared from sources believe to be reliable, but it is the responsibility of the user to investigate and understand other pertinent sources of information, to comply with all laws and procedures applicable to the safe handling and use of the product and to determine the suitability of the product for its intended

use. All products supplied by Epoxy-Coat Inc. are subject to Epoxy-Coat Inc.'s terms and conditions of sale. EPOXY-COAT INC. MAKES NO WARRANTY, EXPRESS OR IMPLIED, CONCERNING THE PRODUCT OR THE MERCHANTABILITY OR FITNESS THEREOF FOR ANY PURPOSE OR CONCERNING THE ACCURACY OF ANY INFORMATION PROVIDED BY EPOXY-COAT, except that the product shall conform to EPOXY-COAT INC.'s specifications. Nothing contained herein constitutes an offer for the sale of any product.