

MATERIAL SAFETY DATA SHEET

Epoxy 4000 Pigmented Part A

SECTION I

Product Identification and General Information

Product Name: Epoxy 4000 Pigmented Part A
Product Class: Epoxy Resin
HMIS Codes: H F R P
2 1 0 G

Date Prepared: 4/21/99
24 Hour Emergency Assistance: Chemtrec
1-800-424-9300

SECTION II

Hazardous Ingredients

	<u>CAS#</u>	<u>OSHA PEL</u>	<u>AGGIH TLV</u>
Diglycidyl Ether of Bisphenol	25068-38-6	N/E	N/E
Benzyl Alcohol	100-51-6	N/E	N/E
Cresyl Glycidyl Ether	2210-79-9	N/E	N/E
TI02	13463-67-7	N/E	N/E

SECTION III

Physical Data

Boiling Point: N/A
Vapor Pressure: N/A
Vapor Density: N/A
Specific Gravity: 1.37
Percent Volatiles: None

Solubility in Water: Slight
Evaporation Rate: N/A
Appearance: White of Colored Viscous Liquid
Odor: Slight Ammonia and Solvent Odor

SECTION IV:

Fire and Explosion Hazard Data

Flash Point: >250° F

Flammable Limits:

LEL: N/A

UEL: N/A

Extinguishing media: Use water fog, "Alcohol" foam, dry chemical or CO2

Hazardous Combustion Products: Carbon Monoxide, Aldehydes, Acids and other Organic Compounds may be formed.

Special fire fighting procedures: Wear full protective equipment including NIOSH approved Self-Contained breathing apparatus.

Fire and Explosion hazards: Heating resins above 300 degrees F in the presence of air may cause slow oxidative decomposition. Above 500 degrees F Polymerization may occur. Aliphatic amine can produce strong exothermic reactions which in large masses can cause runaway polymerization and charring of the reactants. Do not breathe fumes.

SECTION V

Reactivity Data

Stability: Stable

Hazardous Polymerization: Will not occur

Incompatibility: Uncontrolled reaction with Amines

SECTION VI

Health Hazard Data

Primary Route of Entry: Dermal, Inhalation

Eye Contact: May be severely irritating to the eyes. May cause corneal damage.

Skin Contact: Can cause skin irritation. May cause skin sensitization.

Inhalation: May cause nasal and respiratory irritation. Central nervous system effects including dizziness, weakness, nausea and headache.

Ingestion: May cause gastrointestinal irritation including nausea, vomiting and diarrhea.

Chronic Overexposure: Skin sensitization may be evidenced by rashes.

SECTION VII

Emergency First Aid Procedures

Eye Contact: Immediately flush eyes with plenty of water for at least 15 min. while holding lids open. Seek medical attention.

Skin Contact: Immediately remove contaminated clothing. Wipe excess from skin and flush with plenty of water. Use soap if available. Do not reuse clothing until thoroughly cleaned. Seek medical attention.

Inhalation: Remove victim to fresh air and provide oxygen if breathing is difficult. Give artificial respiration if not breathing. Seek medical attention.

Ingestion: Do not induce vomiting. If vomiting occurs spontaneously keep head below hips to prevent aspiration of liquid into the lungs. Seek medical attention.

SECTION VIII

Special Protection Information

Respiratory Protection: Wear NIOSH approved respirator for organic vapors to prevent overexposure.

Ventilation: Provide sufficient ventilation to maintain exposure below level of overexposure.

Eye Protection: Wear chemical splash goggles or other approved safety goggles.

Skin Protection: Wear chemical resistant gloves and other clothing as required to minimize contact.

SECTION IX

Spill or Leak Procedures

Steps to be taken if material is released or spilled:

Large Spill: Eliminate all ignition sources. Wear respirator and other protective clothing. Stop spill at source. Dike and contain spill. Pump or vacuum transfer spilled material to a clean recovery vessel. Soak up residue with absorbent material.

Small Spills: Absorbent material should be used to take up the spill.

Waste Disposal Method: Dispose of material in accordance with all federal, state, and local regulations.

SECTION X

Shipping Data

D.O.T. Shipping Name: Paint Related Materials

Technical Shipping Name: Epoxy Resin

D.O.T. Hazard Class: Not Regulated

UN/NA Number: N/A

Reportable Quantity: N/A

D.O.T. Labels Required: Not Regulated

Freight Class: 55

MATERIAL SAFETY DATA SHEET

Epoxy 4000 Pigmented Part B

SECTION I

Product Identification and General Information

Product Name: Epoxy 4000 Part B
Product Class: Aliphatic Amine Adduct
HMIS Codes: H F R P
3 1 0 G

Date Prepared: 4/21/99
24 Hour Emergency Assistance: Chemtrec
1-800-424-9300

SECTION II

Hazardous Ingredients

	<u>CAS#</u>	<u>OSHA PEL</u>	<u>AGGIH TLV</u>
Polyoxypropylene Amine	9046100	N/E	N/E
Amino Ethyl Piperazine	140-31-8	N/E	N/E
Nonyl Phenol	25154-52-3	N/E	N/E
Benzyl Alcohol	100-51-6	N/E	N/E
Isophorone Diamine	2855-13-2	N/E	N/E
1,5 Pentandiamin, 2 Methyl	15520-10-2	N/E	N/E
Diglycidyl Ether of Bisphenol A	25068-38-6	N/E	N/E

SECTION III

Physical Data

Boiling Point: N/A
Vapor Pressure: N/A
Vapor Density: Heavier Than Air
Specific Gravity: 1.00
Percent Volatiles: N/A

Solubility in Water: Moderate
Evaporation Rate: N/A
Appearance: Yellow to Brown Liquid
Odor: Ammonia

SECTION IV:

Fire and Explosion Hazard Data

Flash Point: 180° F
Flammable Limits:
LEL: N/A
UEL: N/A
Extinguishing media: Use water fog, "Alcohol" foam, dry chemical or CO2
Hazardous Combustion Products: Ammonia, Oxides of Nitrogen, Toxic Fumes
Special fire fighting procedures: Wear full protective equipment including NIOSH approved Self-Contained breathing apparatus.
Fire and Explosion hazards: Exposure to heat will build pressure in container. Cool with water spray.

SECTION V

Reactivity Data

Stability: Stable
Hazardous Polymerization: Will not occur
Incompatibility: Mineral acids, organic acids and strong oxidizing agents.

SECTION VI

Health Hazard Data

Primary Route of Entry: Dermal, Inhalation, eye contact
Eye Contact: Exposure to liquid or vapors can cause severe eye irritation. Symptoms include tearing, redness, burning, swelling and eye damage.
Skin Contact: Can cause skin irritation. Redness, burning and skin damage.
Inhalation: Excessive inhalation of vapors can cause nasal and respiratory irritation, CNS effects include dizziness, weakness, nausea, headache and possible unconsciousness. May cause nasal and respiratory irritation. Central nervous system effect including dizziness, weakness, nausea, and headache.
Ingestion: May cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Chronic Overexposure: May cause skin sensitization.

SECTION VII

Emergency First Aid Procedures

Eye Contact: Immediately flush eyes with plenty of water for at least 15 min. while holding lids open. Seek medical attention.

Skin Contact: Immediately remove contaminated clothing. Wipe excess from skin and flush with plenty of water. Use soap if available. Do not reuse clothing until thoroughly cleaned. Seek medical attention.

Inhalation: Remove victim to fresh air and provide oxygen if breathing is difficult. Give artificial respiration if not breathing. Seek medical attention.

Ingestion: Do not induce vomiting. Give large quantities of water. Call physician immediately.

Inhalation: Remove victim to fresh air and provide oxygen if breathing is difficult. Seek medical attention.

Note to Physician: After ingestion, the patient may improve after the initial crisis, but perforation of gastrointestinal tract may occur 2-4 days later with severe abdominal pain, rigidity and tenderness of the abdomen and shock. Strictures of the esophagus may occur.

SECTION VIII

Special Protection Information

Respiratory Protection: Wear NIOSH approved respirator for organic vapor to prevent overexposure.

Ventilation: Provide sufficient ventilation to maintain exposure below level of overexposure.

Eye Protection: Chemical splash goggles and full face shield.

Skin Protection: Wear chemical resistant gloves and other clothing as required to prevent any contact with skin.

SECTION IX

Spill or Leak Procedures

Steps to be taken if material is released or spilled: Ventilate spill area. Cover with inert, absorbent material and remove to disposal container. Observe all federal, state, and local regulations. Do not flush to surface water or sanitary sewer.

Waste Disposal Method: Do not contaminate any lakes, streams, pond or underground water supply. Dispose of material in accordance with all federal, state, and local regulations.

SECTION X

Shipping Data

D.O.T. Shipping Name: Amines, Liquid Corrosive N.O.S.

Technical Shipping Name: Aliphatic Amine

D.O.T. Hazard Class: 8 Corrosive Liquid

UN/NA Number: UN2735

Reportable Quantity: N/A

D.O.T. Labels Required: Corrosive

Freight Class: 55

Packing Group: III