

MATERIAL SAFETY DATA SHEET

EMS 100 (Epoxy Moisture Stop) – Part A

SECTION I

Product Identification and General Information

Product Name: EMS 100 - Part A
 Product Class: Epoxy Resin
 HMIS Codes: H F R P
 2 1 0 G

Date Prepared: 11/10/2009
 24 Hour Emergency Assistance: Chemtrec
 1-800-424-9300

SECTION II

Ingredients

Diglycidyl Ether of Bisphenol A
 Bisphenol F Epoxy Resin
 Cresyl Glycidyl Ether

<u>CAS#</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
25068-38-6	N/E	N/E
28064-14-4	N/E	N/E
2210-79-9	N/E	N/E

SECTION III

Physical Data

Boiling Point: N/A
 Vapor Pressure: N/A
 Vapor Density: N/A
 Specific Gravity: 1.13
 Percent Volatiles: None

Solubility in Water: Slight
 Evaporation Rate: N/A
 Appearance: Clear Viscous Liquid
 Odor: Mild

SECTION IV

Fire and Explosion Hazard Data

Flash Point: >250° F

Flammable Limits:

LEL: N/A

UEL: N/A

Extinguishing media: Water fog, "Alcohol" foam, dry chemical, CO₂.

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

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

Fire and explosion hazards: Heating resin above 300°F in the presence of air may cause slow oxidative decomposition. Above 500°F Polymerization may occur. Aliphatic amines 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: Can cause severe irritation, redness, tearing and blurred vision.

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 eyelids 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: Chemical splash goggles or other approved safety glasses.

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 Material

Technical Shipping Name: Epoxy Resin

D.O.T. Hazard Class: Not Regulated

UN/NA Number:

Reportable Quantity: None

D.O.T. Labels Required: None

Freight Class: 55

MATERIAL SAFETY DATA SHEET

EMS 100 (Epoxy Moisture Stop) – Part B

SECTION I

Product Identification and General Information

Product Name: EMS 100 - Part B
 Product Class: Amine Blend
 HMIS Codes: H F R P
 3 1 0 G

Date Prepared: 11/10/2009
 24 Hour Emergency Assistance: Chemtrec
 1-800-424-9300

SECTION II

	<u>CAS#</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
Ethylene Diamine	107-15-3	N/E	N/E
1,3 Cyclohexanedimrthamine	2579-20-6	N/E	N/E
Tris -2,4,6- (Dimethylaminomethyl) Phenol	90-72-2	N/E	N/E
Benzyl Alcohol	100-51-6	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: 1.01
 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: Water Fog, Foam, Dry Chemical or CO2.
 Hazardous Combustion Products: Ammonia, Oxides of Nitrogen, Toxic Fumes.
 Special Fire Fighting Procedures: Wear full protective clothing 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 may cause severe eye irritation. Symptoms include tearing, redness, burning, swelling and eye damage.

Skin Contact: May 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.

Ingestion: Can cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chronic Overexposure: May cause skin sensitization.

SECTION VII

First Aid

Eyes: Immediately flush eyes with copious amounts of water for 15 minutes. Seek medical attention.

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

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: Use appropriate NIOSH approved respirator for organic vapor to prevent overexposure.

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

Eye Protection: Chemical goggles and full face shield.

Skin Protection: Wear chemical resistant gloves and other clothing as required to prevent any contact with the 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. Follow all federal, state and local regulations for disposal.

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