

MSDS.441 – E100-PT1™ Crystal Epoxy - Part A

Revised: 2.28.10

Material Safety Data Sheet

(Date of Revision 2/28/2010)

MSDS # 441 Part A

Product Name: E100-PT1™ Crystal Epoxy

Section: 1 – IDENTIFICATION**Product name:** E100-PT1™ Crystal Epoxy - Part A**Product Type:** Epoxy Resin (Resin for Coatings & Adhesives)**For Emergency Medical Assistance:**

Call Health & Safety Information Services: (1-866-303-6949)

For Emergency Transportation Information:

CHEMTREC US DOMESTIC (800-424-9300)

CHEMTREC INTERNATIONAL (703-527-3887)

CANUTEC, CA DOMESTIC (613-996-6666)

Company

Elite Crete Systems

1061 transport Drive

Valparaiso, IN 46383

Section: 2 – HAZARDS IDENTIFICATION

This Product is classified as hazardous as defined within OSHA Hazard Communication Standard 29CFR1910.1200

Classification: Skin & Eye Irritant. Dangerous for the Environment.**Human Health Hazards:****Skin Contact:** May be irritating to skin upon repeated or prolonged contact. May cause skin sensitization by direct or indirect skin contact.**Eye Contact:** May cause Eye irritation & burns.**Ingestion:** May be slightly toxic and harmful if swallowed.**Inhalation:** May possibly cause pulmonary and respiratory tract sensitization or irritation.**Safety hazards:** Material will not burn if not preheated.**Section: 3 – COMPOSITION / INFORMATION ON INGREDIENTS**

Components	CAS No.	Weight %
Bisphenol A/Epichlorohydrin epoxy resin	25068-38-6	74%
0-Cresyl glycidyl ether	2210-79-9	26%

Section: 4 – FIRST AID MEASURES**Inhalation:** Remove victim to fresh air and provide oxygen if breathing is difficult. Give artificial respiration if not breathing. Get medical attention immediately.**Skin Contact:** Remove contaminated clothing/shoes and wipe excess from skin. Flush skin with clean potable water. Follow by washing with soap and clean potable water. In case of inflammation (redness, irritation), get medical attention immediately. Show this sheet to doctor. Do not reuse clothing until cleaned. Contaminated leather articles including shoes cannot be decontaminated and should be destroyed to prevent reuse.**Eye Contact:** Flush eyes with plenty of clean potable water for at least 15 minutes while holding eyelids open. Get medical attention immediately.**Ingestion:** Do not induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Get medical attention immediately.**NOTES TO PHYSICIAN:****Symptoms:** Irritation as noted above. Skin sensitization (allergy) may be evidenced by rashes, especially hives. Lung sensitization (e.g., allergy asthma) may be evidenced by wheezing with shortness of breath and cough.**Treatment:** If more than 2.0 ml per kg has been ingested and vomiting has not occurred, emesis should be induced with supervision. Keep victims head below hips to prevent aspiration. If symptoms such as loss or gag reflex, convulsions or unconsciousness occur before emesis, gastric lavage using a cuffed endotracheal tube should be considered.**Section: 5 – FIRE FIGHTING MEASURES****Flammability Classification:** Combustible IIIB**Flash Point:** >228 F (109°C)**Flammable limits in Air:** Not established for this product **Auto ignition Temperature:** Not established for this product**Extinguishing Media:** Use: water fog, 'alcohol foam", dry chemical or carbon dioxide.**Specific hazards:** Material will not burn unless preheated. Cool fire exposed containers with water. Do not use high volume water jet as it may spread fire.**Special Protective Equipment for Firefighters:** Do not enter confined 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**Section: 6 – ACCIDENTAL RELEASE MEASURES****Personal Precautions:** Isolate area, keep unnecessary and unprotected personnel from entering the involved area. Avoid contact with skin, eyes and clothing. Use appropriate safety gear and equipment as described in section #5.

Environmental Precautions: Dyke and contain spill. Prevent contamination of soil and water. Prevent spreading or entering drains, ditches or waterways.

Clean up methods:

Small Spillage Take up with inert absorbent material and dispose of properly.
 Large Spillage Remove with vacuum trucks or pump into storage/salvage vessels.
 Soak up residue with an inert absorbent material such as clay, sand or other suitable inert material and place in non-leaking containers 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.

Section: 7 – HANDLING AND STORAGE

Handling: WARNING: Material may be slightly toxic if swallowed. May cause skin sensitization. May possibly cause pulmonary sensitization. Containers, even those that have been emptied, can contain hazardous product residues. Avoid skin contact. Wash with soap and water before eating, drinking, smoking, and 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.

Storage: Store in a cool dry place with adequate ventilation. Keep away from open flames. Ideally, maintain storage temperature between 50-90°F (10-35°C).

Section: 8 – EXPOSURE CONTROLS & PERSONAL PROTECTION

Protective Measures: Wear appropriate NIOSH approved respirator and protective clothing, including protective chemical goggles, gloves and boots.

Engineering Controls: Use ventilation as required to control vapor concentrations. Eye wash fountains and safety showers should be available for emergency use. Have protective clothing, chemical goggles, gloves and NIOSH approved respirators for visitors and workers available at all times.

Eye Protection: Avoid contact with eyes. Wear Chemical goggles when around this product at all times.

Skin & Body Protection: Avoid prolonged or repeated contact with skin. Wear chemical-resistant gloves and other clothing as required to minimize contact.

Respiratory Protection: Avoid breathing vapor or mists. Use a NIOSH-approved respirator as required to prevent overexposure. In accordance with 29 CFR 1910.134, use either a full-face, atmosphere-supplying respirator or air-purifying respirator for organic vapors.

Exposure Guidelines:

Components with workplace control parameters	Regulation	Remarks
Bisphenol A/Epichlorohydrin Resin	ACGIH	None Established
O-Cresyl Glycidyl Ether	ACGIH	None Established

Section: 9 – PHYSICAL & CHEMICAL PROPERTIES

Appearance: Liquid	Color	colorless to light yellow
Flash Point: >199.99°F (93.33°C) Setaflash	Vapor pressure:	No data available
Relative Density: 1.14	Relative vapor density:	>1
Solubility in Water: Insoluble	Odor:	Faint epoxy odor
Average Molecular Weight (Daltons) <700		

Section: 10 – STABILITY & REACTIVITY

Stability: Stable at ambient temperatures. Upon prolonged storage or at temperatures below 55°F (13°C) material may crystallize. Crystallized material may be re-liquefied by heating slowly to 122°F (50°C) for 3 to 6 hours.

Materials to avoid: Can react vigorously with strong oxidizing agents, strong Lewis or mineral acid, and strong mineral and organic bases, especially primary and secondary aliphatic amines. Reacts with considerable heat release with some curing agents.

Conditions to avoid: Elevated temperatures (potentially violent decomposition may occur above 662°F (350°C))

Hazardous Decomposition Products: Uncontrolled exothermic reaction of epoxy resin releases Carbon Monoxide, carbon dioxide, Phenolic compounds and acids may be formed during combustion.

Hazardous Reactions: Hazardous polymerization will not occur.

Section: 11 – TOXICOLOGICAL INFORMATION

Acute Oral Toxicity: Data on similar Product indicate this material is essentially non toxic LD50>2000 mg/kg

Acute Dermal Toxicity: Data on similar Product indicate this material is essentially non toxic LD50>2000 mg/kg

Components	Concentration	Regulation	value	Remarks
Bisphenol A/Epichlorohydrin Resin	74%	US IARC Monographs on Occupational exposures to		These components have not been classified by the International agency for Research on Cancer (IARC)
O-Cresyl Glycidyl Ether	26%	Chemical agents		

Potential Health Effects:

Inhalation: Not expected to be a relevant route of exposure, however, under conditions where exposure to vapors or mists is possible could cause respiratory tract irritation. May cause possible pulmonary sensitization.

Skin: May be mildly irritating to the skin. Prolonged or repeated liquid contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis.

Eyes: May be irritating to eyes.

Ingestion: May be slightly toxic and may be harmful if swallowed.

Aggravated Medical Condition: Preexisting eye, skin and respiratory disorders may be aggravated by exposure of this product. Preexisting skin or lung allergies may increase the chance of developing increased allergy symptoms from exposure.

Section: 12 – ECOLOGICAL INFORMATION

Biodegradability: Not readily biodegradable; moderate potential to bioconcentrate.

Ecotoxicity Effects: Data for the type of epoxy resin in this product indicate that the material is moderately toxic to aquatic organisms on an acute basis where the LC50 for most sensitive species is 1-10 mg/L; however, the toxicity to aquatic species occurs at concentrations greater than the water solubility of the material.

Section 13 – DISPOSAL CONSIDERATIONS

Product Disposal: If this product becomes waste, it would not be a hazardous waste by RCRA criteria (40 CFR 261). Place in an appropriate disposal facility in compliance with all federal, State and local regulations. Disposal is the responsibility of the generator.

Container Disposal: Containers should be completely drained of all residual product prior to disposal.

Section: 14 – TRANSPORTATION INFORMATION

DOT: Not Regulated
CFR_ROAD: Not Regulated
IMDG: Not Regulated
IATA_C: Not Regulated

Section: 15 – REGULATORY INFORMATION

SARA TITLE III SECTION 311/312 (40CFR370): Acute health Hazard
SARA TITLE III SECTION 313 (40CFR372): No reportable components
SARA TITLE III Section 302 (40CFR355), appendix A No Reportable components
US EPA CERCLA Status (40CFR302): No Reportable components
TSCA Inventory Status: No Reportable components
Canadian DSL Status: Report included (all components listed)
Canadian WHMIS Classification: D2B (eye, skin irritant; skin sensitizer)
OSHA/NTP/IARC Carcinogen Status: Not listed
Chemicals known to the State of California to Cause Cancer or Reproductive Toxicity:
 This product contains Epichlorohydrin CAS # 106-89-8 (trace amount).
New Jersey Right to know Chemical List: Not Listed
Pennsylvania Right to Know Chemical list Not Listed
Massachusetts right to know Chemical list Not Listed
Additional components not found in Section: 2 Phenyl Glycidyl Ether CAS# 122-60-1 <5PPM NOT LISTED
California Safe Drinking Water & Toxic Enforcement Act (Proposition 65)
 Phenyl Glycidyl Ether, < 5PPM, US Calif. Safe Drinking Water & Toxic Enforcement Act (Prop. 65),
 Listed October 1, 1990 Remarks: Carcinogenic

HMIS Health 2, Safety 1, Reactivity 0

Section: 16 – OTHER INFORMATION

Reference: Prepared in accordance with 29 CFR 1910.1200 Elite Crete Systems, R & D Lab