



---

**SECTION VI - HEALTH HAZARD DATA****PENTOX 50 - A Resin**

POTENTIAL EFFECTS OF EXPOSURE (listed by primary routes of entry)

INHALATION: May cause irritation of nasal passages and throat. High vapor concentration can cause stupor (central nervous system depression).

SKIN: Prolonged contact can cause moderate irritation, defatting and dermatitis.

INGESTION: Can cause gastrointestinal irritation, headache, nausea, vomiting, digestive disorders, difficulty breathing, irregular heartbeat, drunkenness and coma. Aspiration of material into lungs can cause chemical pneumonitis.

EYE CONTACT: Liquid and vapors are irritating to eyes. Can cause severe injury - damage reversible.

**EMERGENCY & FIRST AID PROCEDURES**

INHALATION: Remove person to fresh air. Administer oxygen if breathing is difficult. If breathing has stopped, give artificial respiration. Keep person warm, quiet, and seek medical attention.

SKIN: Flush skin with water while removing clothing and shoes. If irritation occurs, get medical attention. Do not reuse clothing or shoes until cleaned.

INGESTION: If swallowed, DO NOT INDUCE VOMITING. This material is an aspiration hazard. Immediately give two glasses of water or milk unless victim is unconscious. If individual is unconscious or drowsy place on left side with head down. Contact a physician immediately.

EYE CONTACT: Flush with large amounts of water, lifting upper and lower lids occasionally. Get immediate medical attention.

CARCINOGENICITY OSHA: NO NTP: NO IARC: NO

HMIS Ratings: Health- 2\* Flammability-3 Reactivity-0, \*= Chronic Health Hazard  
See Section VIII for Personal Protection Equipment

---

**SECTION VII - PRECAUTIONS FOR SAFE HANDLING & USE**

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Remove all sources of ignition. Absorb on combustible material for proper disposal. Flush contaminated area with soap and water. Call the National Response Center (800-424-8802) if the quantity spilled is equal to or greater than the reportable quantity (5,000 lb./dry) under CERCLA Superfund.

WASTE DISPOSAL METHOD: Incineration in accordance with local pollution regulations and ordinances. Preferred methods of waste disposal are incineration or biological treatment in federal/state approved facility.

PRECAUTIONS TO BE TAKEN IN HANDLING & STORAGE: Store in a cool, well ventilated area at a temperature between 59 –77 deg. F. Keep away from heat sparks and flame. Keep containers closed when not in use. Open containers slowly to allow any excess pressure to vent. Use spark resistant tools. Use with adequate ventilation, avoid breathing vapor, avoid contact with eyes, skin, and clothing. Discard contaminated leather clothing.

OTHER PRECAUTIONS: Empty containers have hazardous residues which must be observed. Store away from heat and flame.

---

**SECTION VIII - CONTROL MEASURES**

RESPIRATORY PROTECTION: NIOSH/MSHA approved organic vapor respirator required.

**VENTILATION**

LOCAL EXHAUST: General mechanical

SPECIAL:

MECHANICAL (general): Not recommended as the sole means of controlling employee exposure.

PROTECTIVE GLOVES: Impervious

EYE PROTECTION: Splash-proof goggles

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Aprons and boots as necessary to prevent skin contact.

WORK/HYGIENIC PRACTICES: Launder contaminated clothing before reusing. Do not eat, drink, or smoke while using this product.

**END OF MSDS**

**MATERIAL SAFETY DATA SHEET**  
Prepared according to 29 CFR 1910.1200

DATE PREPARED: June, 1990  
DATE REVISED: May, 2011

PAGE 1  
MSDS NO: 166B

---

**SECTION I - IDENTIFICATION**

L&M CONSTRUCTION CHEMICALS, INC.  
14851 CALHOUN ROAD  
OMAHA, NE 68152

ASSISTANCE (CHEMTREC) 800-424-9300  
EMERGENCY PHONE NO. 402-453-6600

ID NO.: UN 2924

PRODUCT  
NAME: **PENTOX 50** - "B" Catalyst Hardener

HAZARD CLASS: 3,8

Packaging Group III

CHEMICAL  
NAME: Epoxy Amine

DOT SHIPPING NAME: Flammable  
Liquids, Corrosive, N.O.S., (Xylene, Alkyl phenol)

---

**SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION**

INGREDIENTS	OSHA PEL	ACGIH TLV	CAS	% wt
#1: *Xylene	100 PPM	100 PPM	1330-20-7	40-50
#2: Nonyl Phenol	N/A	N/A	84852-15-3	20-40
#3: aminoethyl piperazine	N/A	N/A	140-31-8	10-20

\* This ingredient is a toxic chemical subject to the reporting requirements of Section 313 of SARA Title III and of 40 CFR 372.

Unlisted ingredients are not "hazardous" per OSHA standard 29 CFR 1910.1200 and are considered to be a trade secret of L&M Construction Chemicals, Inc.

---

**SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS**

BOILING POINT (F): 280-288  
VAPOR PRESSURE (mm Hg): 6.6 for xylene  
VAPOR DENSITY (AIR = 1): 3.7 for xylene  
SOLUBILITY IN WATER: Low  
APPEARANCE: Amber liquid  
ODOR: Mild Ammonical Odor

SPECIFIC GRAVITY (H<sub>2</sub>O = 1): ..91  
PERCENT VOLATILE BY VOLUME: 50  
MELTING POINT: N/Ap  
BULK DENSITY: 7.58 lb/gal.  
PH INFORMATION: N/A  
EVAPORATION RATE: <1  
(Bu Ac #1)

---

**SECTION IV - FIRE AND EXPLOSION HAZARD DATA**

HAZARDS FIRES: High                      PRESSURE:                      REACTIVITY:  
FLASH POINT, °F, (TCC): 79EF  
FLAMMABLE LIMITS (% V): LEL: 1.1%                      UEL: 6.6%

EXTINGUISHING MEDIA: Water spray, dry chemical, CO<sup>2</sup> or alcohol foam .

SPECIAL FIRE FIGHTING PROCEDURES: Self-contained breathing apparatus and full protective clothing.  
Closed containers could rupture when exposed to the elevated temperatures of fire conditions.

---

**SECTION V - REACTIVITY DATA**

STABILITY: unstable:                      stable: X  
INCOMPATIBILITY (materials to avoid): Mineral acids, nitric acid, strong oxidizing agents  
HAZARDOUS DECOMPOSITION OR BYPRODUCTS: CO, CO<sub>2</sub>, and oxides of nitrogen  
HAZARDOUS POLYMERIZATION:                      may occur:                      will not occur: X  
CONDITIONS TO AVOID: Epoxy resins in uncontrolled conditions.

---

**SECTION VI - HEALTH HAZARD DATA and FIRST AID****PENTOX 50 - "B" Catalyst**

POTENTIAL EFFECTS OF EXPOSURE (listed by primary routes of entry)

INHALATION: Severe respiratory tract irritation. Toxic systemic effects are possible.

SKIN: Acutely toxic. Corrosive. Defatting of skin, chemical dermatitis and other toxic systemic effects are possible. .

INGESTION: Toxic. May cause death unless treated promptly. May cause vomiting, diarrhea, bleeding of GI track and vomiting of blood unless treated promptly.

EYE CONTACT: Corrosive.

**EMERGENCY & FIRST AID PROCEDURES**

INHALATION: Remove person to fresh air. Administer oxygen if breathing is difficult. If breathing has stopped, give artificial respiration. Keep person warm, quiet, and seek medical attention.

SKIN: Thoroughly wash exposed area with soap and water. Remove contaminated clothing. Launder before reuse.

INGESTION: DO NOT INDUCE VOMITING. Keep person warm, quiet and get medical attention immediately. Aspiration of material into lungs due to vomiting may cause chemical pneumonitis which can be fatal.

EYE CONTACT: Flush with large amounts of water, lifting upper and lower lids occasionally. Get immediate medical attention.

CARCINOGENICITY OSHA: NO NTP: NO IARC: NO

HMIS Ratings: Health- 3 Flammability-3 Reactivity-0  
See Section VIII for Personal Protection Equipment

---

**SECTION VII - PRECAUTIONS FOR SAFE HANDLING & USE**

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Remove all sources of ignition. Broadcast absorbent material. Allow material to soak. Rinse area with water.

WASTE DISPOSAL METHOD: Remove to appropriate chemical waste disposal area in accordance with local, state and federal regulations.

PRECAUTIONS TO BE TAKEN IN HANDLING &amp; STORAGE: May cause irritation. Avoid contact with eyes or pronged contact with skin. Immediately flush eyes with water for at least 15 minutes/get medical attention. Store between 59 – 79 deg. F.

OTHER PRECAUTIONS: Empty containers have hazardous residue which must be observed. Store away from heat and flame.

---

**SECTION VIII - CONTROL MEASURES**RESPIRATORY PROTECTION: NIOSH/MSHA approved organic vapor respirator required.  
VENTILATION, LOCAL EXHAUST: General mechanical ventilation and local exhaust.

PROTECTIVE GLOVES: PVC gloves

EYE PROTECTION: Splash-proof goggles

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Aprons and boots as necessary to prevent skin contact.

WORK/HYGIENIC PRACTICES: Launder contaminated clothing before reuse. Do not eat, drink, or smoke while using this product.

**END OF MSDS**