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# Material Safety Data Sheet

Prepared According to the OSHA Hazard Communication Standard (29 CFR 1910.1200)

**Product Name**  
**CIM 61BG Epoxy Hardener**

**Description**  
**Phenolic Polyamine Cross Linker for Epoxy Resin**

**Emergency Telephone**  
CHEMTREC (800) 424-9300  
C.I.M. Industries Inc. (603) 924-9481  
**Prepared by:**  
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## CAUTION!

**Flammable Liquid —**  
**Keep out of reach of children.**

**May cause eye, skin, and respiratory irritation. Prolonged or repeated contact with skin and inhalation can be harmful.**

### HAZARDOUS CONSTITUENTS

Component	CAS#	ACGIH		OSHA		% Range	Primary Hazard
		TWA	STEL	TWA	STEL		
	68413-28-5			2		70-80	Irritant
Alkylated Phenolic	68413-29-6					5-10	Irritant
Polyamine	107-15-3	10		10		1.0-5.0	Irritant/Corrosive
Ethylenediamine	100-41-4	100	125	100	125	0.1-1.0	Flammable/Solvent Effects
Ethyl Benzene	1330-20-7	100	150	100	150	10-20	Flammable/Solvent Effects
Xylene							

### HEALTH EFFECTS

**Eyes**  
Irritation of eyes. Prolonged or repeated contact can cause conjunctivitis, blurred vision, tearing of eyes, redness of eyes, severe eye irritation, severe eye irritation or burns, corneal injury.

### EMERGENCY & FIRST AID PROCEDURES

Flush immediately with large amounts of water, especially under lids for at least 15 minutes. If irritation or other effects persist, obtain medical treatment

### SPECIAL PROTECTION

Wear chemical resistant safety goggles.

### Skin

Irritation of skin. Prolonged or repeated contact can cause dermatitis, defatting, blistering, allergic response, severe skin irritation or burns. Possible sensitization to skin.  
LD<sub>50</sub> (rabbit) > 1 g/kg.

Wash thoroughly with soap and water. If any product remains, gently rub petroleum jelly, vegetable or mineral/baby oil onto skin. Repeated applications may be needed. Remove contaminated clothing before re-use. Dispose of contaminated leather items, such as shoes and belts.

Skin contact can be minimized by wearing protective clothing and chemical resistant gloves. Use protective cream where skin contact is likely.

### Inhalation

Prolonged inhalation may lead to fatigue, drowsiness, dizziness and/or light headedness, headache, un-coordination, nausea, vomiting, blurred vision, coughing, difficulty with speech, central nervous system depression, anesthetic effect or narcosis, difficulty of breathing, asthmatic reaction, tremors, respiratory tract burns, liver damage, kidney damage, loss of consciousness, respiratory failure, asphyxiation, death. Possible sensitization to respiratory tract.

Remove to fresh air. Restore and support continued breathing. Get emergency medical attention. Have trained person give oxygen if necessary. Get medical help for any breathing difficulty.

Use in well ventilated areas only. Wear an OSHA approved type C air supplied respirator if ventilation is inadequate to keep solvent inhalation vapors below the TLV. Particulate, chemical cartridge, air purifying half-mask respirators can be used within certain limitations; consult the respirator manufacturer for specific uses and limitations. Where airborne contaminate concentrations are unknown, the use of a NIOSH/MSHA approved fresh-air supplied respirator is mandatory.

### Ingestion

Ingestion may cause lung inflammation and damage due to aspiration of material into lungs, dizziness and/or light headedness, nausea, vomiting, diarrhea, gastro-intestinal disturbances, severe abdominal pain, central nervous system depression, burns of the mouth, throat, stomach, liver damage, kidney damage, pulmonary edema.  
LD<sub>50</sub> (rat) > 4 g/kg.

Do not induce vomiting. Obtain medical treatment immediately.

Avoid airborne mists which can be inhaled or swallowed. Use protective mask, if necessary.

*All information is based on data of which we are aware and is believed to be correct as of the date hereof. Since the information contained herein may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.*

## FIRE FIGHTING MEASURES

**Unusual Fire and Explosion Hazards:** Closed containers may explode when exposed to extreme heat or fire. Vapors may ignite explosively at ambient temperatures. Vapors are heavier than air and may travel long distances to a source of ignition and flash back. Vapors can form explosive mixtures in air at elevated temperatures. May decompose under fire conditions emitting irritant and/or toxic gases.

**Flash Point(SETA):** 80°F/27°C

**Autoignition Temp.:** NDA

**Flammability Limits:** 1% lower limit, 6.6% upper limit

**Fire Extinguishing Media:** CO<sub>2</sub>, Dry Chemical or Foam, Water Fog

**Fire Fighting Procedures:** Water may be used to cool and protect exposed containers. Fire fighters should use full protective clothing, eye protection, and self-contained breathing apparatus. Self-contained breathing apparatus recommended.

### Hazardous Decomposition or Combustion Products

Carbon Monoxide, Carbon Dioxide, Oxides of Nitrogen

**NFPA Hazard Rating:** Health 3; Flammability 3; Reactivity 1; Special 0, Class II

**DOT Hazard:** Corrosive Liquid, Flammable, n.o.s., 8, UN2920, PGII, (xylene, polyamines),

**IMDG:** Corrosive Liquid, Flammable, n.o.s. (xylene, polyamines), class 8,(3), UN2920, PGII.

## PHYSICAL AND CHEMICAL PROPERTIES

**Solubility in Water:** Not Available

**Appearance (Color, Odor, etc.):** Clear amber liquid

**Boiling Point:** 200°F/93°C

**Melting Point:** N/A

**Specific Gravity:** .980

**Vapor Pressure:** Not Available

**Vapor Density (Air=1):** Heavier than air

**Percent Volatile (Volume):** less than 17%

## ENVIRONMENTAL PROTECTION

**Environmental Impact:** This material may be toxic to aquatic organisms and should be kept out of sewage and drainage systems and all bodies of water.

**Accidental Release Measures:** Steps to be taken in case of material is released or spilled - Comply with all applicable health and environmental regulations. Eliminate all sources of ignition. Ventilate area. Ventilate area with explosion-proof equipment. Spills may be collected with absorbent materials. Use non-sparking tools. Evacuate all unnecessary personnel. Place collected material in proper container. Wet down spilled material with water. Complete personal protective equipment must be used during clean-up. Large spills - Shut off leak if safe to do so. Dike and contain spill. Pump to storage or salvage vessels. Use absorbent to pick up excess residue. Keep salvageable material and rinse water out of sewers and water courses. Small spills - Use absorbent to pick up residue and dispose of properly.

**Disposal Considerations:** Dispose in accordance with all applicable regulations. Avoid discharges to natural waters.

## STABILITY AND REACTIVITY

**Stability (Thermal, Light, etc.):** Under normal conditions stable  
See FIRE FIGHTING MEASURES

**Incompatibility (Materials to Avoid):** Oxidizers, acids, bases, amines, epoxides, nitric acid.

**Conditions to Avoid:** Elevated Temperatures, Contact with oxidizing agent, sparks, open flame, ignition sources.

**Hazardous Polymerization:** Will not occur.

N/A = Not Applicable

NDA = No Data Available

## ADDITIONAL HEALTH DATA

CIM 61BG Epoxy Hardener is used with CIM 61BG Resin to form an epoxy coating formulated as a primer of porous and non porous surfaces such as concrete and metal. Consult the MSDS for CIM 61BG Epoxy Resin. This product does not contain constituents known to be a carcinogen, mutagen, teratogen or reproductive toxin. This product contains certain aromatic solvents subject to the reporting requirements of section 313 of SARA Title III. Spills in excess of 10,000 lb. must be reported to the appropriate federal, state, and local authorities. Contains a chemical that is toxic by ingestion. Contains a chemical that is toxic by inhalation. Contains a chemical that may be absorbed through the skin.

Notice- Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Other effects of overexposure may include toxicity to liver, kidney, central nervous system.

Based on an International Agency for Research on Cancer (IARC) Conclusion that there is "sufficient evidence in experimental animals for the carcinogenicity of ethyl benzene and inadequate evidence of carcinogenicity in humans, IARC's overall evaluation is that ethyl benzene is possibly carcinogenic to humans" (Group 2B).

High exposure to xylene in some animal studies, often at maternally toxic levels, have affected embryo/fetal development. The significance of this finding to humans is not known.

## HANDLING & STORAGE

**READ AND OBSERVE ALL PRECAUTIONS ON PRODUCT LABEL.**

**DO NOT USE OR STORE** near flame, sparks or hot surfaces.

**USE ONLY IN WELL VENTILATED AREA.** Keep container closed when not in use.

**DO NOT** weld, heat or drill container. Emptied container still contains hazardous or explosive vapor or liquid.

**STORE BELOW 80°F.** Store product in accordance with local regulations. Do not exceed indoor limits for storage of Class II flammable liquids.