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Product Name

CIM 61BG Epoxy Resin

# **Material Safety Data Sheet**

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

Description
Bisphenol A Epoxy

Emergency Telephone
CHEMTREC (800) 424-9300
C.I.M. Industries Inc. (603) 924-9481
Prepared by:
R. H. Stephens, C.I.M. Industries Inc.

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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		ACGIH		OSHA			
Component	CAS#	TWA	STEL	TWA	STEL	% Range	Primary Hazard
Epoxy Resin	25085-99-8					20-30	Sensitizer
C12-C14 Alkyl Glycidyl Ether	68609-97-2					1-5	
Xylene	1330-20-7	100	150	100		5-10	Flammable/Solvent Effects
Ethyl Benzene	100-41-4	100	125	100		1-5	Flammable/Solvent Effects
N-Butanol	71-36-3	20		100		1-5	Skin
Quartz	14808-60-7	0.05		0.1		20-30	Contains crystaline silica
Tremolite	14567-73-8					10-20	•
Talc	14807-96-6	2				5-10	Contains crystaline silica
Mica	12001-26-2	3		3		5-10	•
Antigorite	12135-86-3					1-5	
Titanium Dioxide	13463-67-7	10		10		1-5	

#### **HEALTH EFFECTS**

# EMERGENCY & FIRST AID PROCEDURES

## **SPECIAL PROTECTION**

## Eyes

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

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

Wear chemical resistant safety goggles.

Skin

Irritation of skin. Prolonged or repeated contact can cause dermatitis, defatting, blistering, allergic response, severe skin irritation. Possible sensitization to skin.

 $LD_{50}$  (rabbit) > 18 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. Wash contaminated clothing before re-use. Dispose of contaminated leather items, such as shoes and belts. If irritation occurs, consult a physician.

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

#### Inhalation

Irritation of respiratory tract. Prolonged inhalation may lead to mucous membrane irritation, fatigue, drowsiness, dizziness and/or light headedness, headache, un-coordination, nausea, vomiting, diarrhea, abdominal pain, chest pain, blurred vision, coughing, difficulty with speech, apathy, central nervous system depression, intoxication, tightness of chest, metallic taste, anesthetic effect or narcosis, difficulty of breathing, allergic response, fever and chills, dehydration, tremors, liver damage, kidney damage, loss of consciousness, respiratory failure, asphyxiation, death.

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. Remove to fresh air if inhalation causes eye watering, headaches, dizziness, or other discomfort

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, drowsiness, dizziness and/or light headedness, headache, un-coordination, nausea, vomiting, diarrhea, gastro-intestinal disturbances, abdominal pain,visual disturbances, apathy, central nervous system depression,intoxication, anesthetic effect or narcosis, difficulty of breathing, burns of the mouth, throat, stomach, liver damage, kidney damage, pulmonary edema, loss of consciousness, respiratory failure, death. LD50 (rat) > 7 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.: >500°F

Flammability Limits: 1% lower limit, 7% 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, Acrid fumes, Toxic gases.

NFPA Hazard Rating: Health 3; Flammability 3; Reactivity 1;

Special 0, Class II

DOT Hazard: Coating Solution Class 3, UN1139, PG III

## PHYSICAL AND CHEMICAL PROPERTIES

Solubility in Water: Not Available

**Appearance (Color, Odor, etc.):** Tan liquid **Boiling Point:** 276°F-290°F/36°C-143°C

Melting Point: N/A Specific Gravity: 1.606 Vapor Pressure: Not Available

Vapor Density (Air=1): Heavier than air
Percent Volatile (Volume): less than 26.02%

### **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. 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, aldehydes, amines, nitric acid, combustible materials, mineral acids.

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

Hazardous Polymerization: May polymerize in presence of amines.

N/A = Not Applicable
NDA = No Data Available

# **ADDITIONAL HEALTH DATA**

CIM 61BG Epoxy Resin is used with CIM 61BG Hardener to form an epoxy coating formulated as a primer on porous and non porous surfaces such as concrete and metal. Consult the MSDS for CIM 61BG Epoxy Hardener. This product does not contain constituents known to be a 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 moderately toxic by ingestion. 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. Prolonged inhalation of mica may cause pneumoconiosis. Symptoms may include a progressive dry cough, shortness of breath on exertion, decreased chest expansion, weakness and weight loss. Other effects of overexposure may include toxicity to liver, kidney, central nervous system, blood.

Inhalation of non-asbestiform cosmetic grade talc for 2 years at 6 and 18 mg/m3 produced clear evidence of carcinogenicity in female rats (lung and adrenal tumors) and some evidence of carcinogenicity was demonstrated in male and female mice exposed under the same conditions. Microscopic examination of the lungs of rats and mice exposed to talc revealed additional exposure related effects primarily associated with the inflammatory response. Contains crystalline silica which is considered a hazard by inhalation. IARC has classified crystalline silica as carcinogenic to humans (Group 1). Crystalline silica is also a known cause of silicosis, a non-cancerous lung disease. The national toxicology program (NTP) has classified crystalline silica as a known human carcinogen.

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.

This product contains crystalline silica, which is considered a cancer hazard by inhalation of respirable dust. The International Agency for Research on Cancer (IARC) concluded that respirable crystalline silica is inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (Group 1B).

This product may also contain small amounts of one or more naturally-occuring materials known to the State of California to cause cancer, birth defects, or other reproductive harm.

## 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.

**DO NOT** weld, heat or drill container. Replace cap or bung. 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.