

# **MATERIAL SAFETY DATA SHEET**



### SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT: RTC Epoxy Part A April 13, 2010

Vishay Measurements Group, Inc. Post Office Box 27777 Raleigh, NC 27611

919-365-3800

CHEMTREC 1-800-424-9300 (U.S.)

703-527-3887 (Outside U.S.)

NOTE: CHEMTREC numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

### SECTION 2: HAZARDOUS INGREDIENTS / IDENTITY INFORMATION

CAS NUMBER CHEMICAL IDENTITY %

25085-99-8 Reaction Product of Epichlorohydrin and Bisphenol A 100

### **SECTION 3: HEALTH HAZARD DATA**

Routes of Entry:

Inhalation: Yes Skin: Yes Ingestion: Accidental

**Health Hazards (Acute and Chronic):** Except for skin sensitization, repeated exposures to low molecular weight epoxy resins of this type are not anticipated to cause any significant adverse effects.

Carcinogenicity: NTP: Not listed

IARC Monographs: Not listed OSHA Regulated: Not listed

Signs and Symptoms of Exposure:

**INHALATION**: Vapors are unlikely due to physical properties.

**EYE CONTACT**: May cause slight transient (temporary) eye irritation. Corneal injury is unlikely.

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RTC Epoxy Part A MSDS (Continued)

**SKIN CONTACT**: Prolonged or repeated skin contact may cause skin irritation. Has caused allergic skin reaction in humans. A single prolonged exposure is not likely to result in the material being absorbed through skin in harmful amounts.

**INGESTION**: Single dose oral toxicity is considered to be extremely low. No hazards anticipated from swallowing small amounts incidental to normal handling operations.

Conditions Generally Aggravated by Exposure: None listed.

# **SECTION 4: EMERGENCY AND FIRST AID PROCEDURES**

**INHALATION**: Move person to fresh air. If effects occur, consult a physician.

**EYE CONTACT**: Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.

**SKIN CONTACT**: Remove material from skin immediately by washing with soap and plenty of water. Remove contaminated clothing and shoes while washing. Seek medical attention if irritation persists. Wash clothing before reuse. Discard items which cannot be decontaminated, including leather articles such as shoes, belts and watchbands.

**INGESTION**: No adverse effects anticipated by this route of exposure incidental to proper industrial handling.

NOTE TO PHYSICIAN: No specific antidote. Supportive care. Treatment based on judgment of the physician in response to reactions of the patient.

### SECTION 5: FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): 486°F (252°C) PMCC

Flammable limits: LEL: Not applicable UEL: Not applicable

**Extinguishing Media**: Foam, carbon dioxide, dry chemical.

**Special Firefighting Procedures**: Wear positive pressure self-contained breathing apparatus and full protective equipment. Do not use direct water stream as it may cause fire to spread. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of re-ignition is passed.

**Unusual Fire and Explosion Hazards**: The by-products expected in incomplete pyrolysis or combustion of epoxy resins are mainly phenolics, carbon monoxide and water. The thermal decomposition products of epoxy resins therefore should be treated as potentially hazardous substances, and appropriate precautions should be taken.

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### **SECTION 6: ACCIDENTAL RELEASE MEASURES**

**Steps to be taken if material is released or spilled**: Keep unnecessary people away; isolate hazard area. For large spills, evacuate upwind of spills and contain with dike. Keep out of sewers, storm drains, surface water and soil. Soak up in absorbent material such as sand and collect in suitable containers. Residual resin may be removed using steam or hot soapy water.

### SECTION 7: EXPOSURE CONTROLS -- PERSONAL PROTECTION

**Respiratory Protection**: No respiratory protection should be needed.

**Ventilation**: Good general ventilation should be sufficient for most conditions.

**Protective Gloves**: Use chemical resistant gloves.

**Eye Protection**: Use safety glasses.

Other Protective Clothing or Equipment: As needed to prevent exposure.

**Work / Hygienic Practices**: Remove contaminated clothing immediately. Wash skin with soap and water. Launder clothing before reuse.

# **SECTION 8: HANDLING AND STORAGE**

**Precautions to be taken in handling and storing**: Avoid skin and eye contact. Avoid breathing vapors of heated material. Avoid use of electric band heaters. Failure of electric band heaters have been reported to cause drums of liquid epoxy resin to explode and catch fire.

**Other Precautions**: Application of a direct flame to a container of liquid epoxy resin can also cause explosion and/or fire.

# SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point:Not applicableVapor Pressure (mmHg):Not applicableVapor Density (Air = 1):Not applicable

Specific Gravity (H<sub>2</sub>O = 1): 1.16

Melting Point: Not known
Evaporation Rate (BuAc = 1): Not known
Volatile Organic Compounds: Unknown
Solubility in Water: Insoluble

Appearance and Odor: Colorless to slight yellow liquid. Faint epoxy odor.

### **SECTION 10: STABILITY AND REACTIVITY DATA**

Stability: Stable at ambient temperatures.

**Conditions to Avoid**: Avoid temperatures above 572°F (300°C). Potentially violent decomposition can occur above 662°F (350°C). Generation of gas during decomposition can cause pressure in closed systems. Pressure buildup can be rapid.

**Incompatibility (Materials to Avoid):** Bases, acids, amines and oxidizing materials.

**Hazardous Decomposition or By-products**: Phenolics, carbon monoxide and water.

**Hazardous Polymerization**: Will not occur by itself, but masses of more than 1 pound of product plus an aliphatic amine will cause irreversible polymerization with considerable heat buildup.

### SECTION 11: TOXICOLOGICAL INFORMATION

Reaction product of Epichlorohydrin and Bisphenol A

OSHA PEL: Not listed ACGIH TLV: Not listed

OTHER: SKIN (Rabbit) LD<sub>50</sub> 20,000 mg/kg

ORAL (Rat) LD<sub>50</sub> >5,000 mg/kg

### **SECTION 12: DISPOSAL CONSIDERATIONS**

**Waste Disposal Method**: Dispose of in accordance with local, state, and federal environmental regulations.

#### **SECTION 13: TRANSPORTATION INFORMATION**

SHIPPING NAME CLASS PACKING GROUP UN NUMBER

Toxic Liquid, Organic, N.O.S.

(Epichlorohydrin/Bisphenol A) 6.1 III 2810

### **SECTION 14: REGULATORY INFORMATION**

### **SECTION 313 SUPPLIER NOTIFICATION:**

This product contains a toxic chemical or chemicals (as listed below) subject to the reporting requirements of Section 313 Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR Part 372.

CAS NUMBER

**CHEMICAL NAME** 

% BY WEIGHT

None listed

#### TSCA NOTIFICATION:

All components of this product are listed in the Toxic Substance Control Act Chemical Substance Inventory (TSCA).

### **SECTION 15: OTHER INFORMATION**

To the best of our knowledge, the information provided above meets the requirements of the United States Occupational Safety and Health Act and regulations established under 29 CFR 1910.1200 (g)(2)(c)(1)-(4) for a mixture of hazardous chemicals which has not been tested as a whole. The data provided on this Material Safety Data Sheet is from manufacturers of the original components. Micro-Measurements specifically disclaims any and all form of liability and/or responsibility for the application of this product.