

**MATERIAL SAFETY DATA SHEET****PRODUCT NAME:** EPO-TEK 301, Part A**\*HMIS: HEALTH- 2 FIRE-1 REACTIVITY- 0****Carcinogen: NTP (No) IARC (No) OSHA (No)**

\* HMIS ratings are estimated by Epoxy Technology.

**EPOXY TECHNOLOGY****14 FORTUNE DRIVE  
BILLERICA, MA 01821****EMERGENCY PHONE:**

US/CANDA: 800-255-3924

INT'L COLLECT: + 813-248-0585

**DATE REVISED:** 10/8/2004**REV: D**

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**I. IDENTIFICATION & PHYSICAL DATA****PERCENT VOLATILE:** NA**BOILING POINT:** NA**VAPOR DENSITY:** >Air**APPEARANCE:** Clear liquid**ODOR:** Mild**VAPOR PRESSURE:** NA**SOLUBILITY IN WATER:** Low**EVAPORATION RATE:** <BUAC**SPECIFIC GRAVITY:** NA

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**II. HAZARDOUS INGREDIENTS****CAS#****WT %****TOXICITY DATA**Reaction product of epichlorohydrin & bisphenol A  
1,4 Butanediol diglycidyl ether025085-99-8  
2425-79-865-85%  
1-10%See Ingredient Sheet 110104  
NA

Reaction product of epichlorohydrin and bisphenol A requires reporting per OSHA's Hazardous Communication Standards, under 29CFR, 1910.1200. 1,4 Butanediol diglycidyl ether requires reporting per Sara Title III under section 311 and 312.

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**III. FIRE & EXPLOSION DATA****FLASH POINT:** >400F**EXTINGUISHING MEDIA:** Dry chemical, foam, carbon dioxide.**UNUSUAL FIRE & EXPLOSION HAZARDS:** Avoid fumes liberated by heat.**SPECIAL FIRE FIGHTING PROCEDURES:** Wear self contained breathing apparatus and complete personal protective equipment. Remove all ignition sources. Use a water spray to cool fire exposed containers.

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**IV. REACTIVITY DATA****STABILITY:** Stable**HAZARDOUS POLYMERIZATION:** Will not occur.**CONDITIONS TO AVOID:** Excessive heat.**MATERIALS TO AVOID:** Strong oxidizing and reducing agents.**HAZARDOUS DECOMPOSITION PRODUCTS:** Fumes produced when heated to decomposition may include carbon monoxide, and carbon dioxide.

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## V. HEALTH HAZARD DATA

EPO-TEK 301, Part A

### EFFECTS OF OVEREXPOSURE

**INGESTION:** Contains materials that may be moderately toxic. Ingestion can severely upset the gastric system.

**INHALATION:** Hot vapors can cause headaches, nausea, dizziness, and respiratory irritation, if inhaled.

**SKIN CONTACT:** Corrosive; expected to cause severe skin damage with burns and blistering.

**EYE CONTACT:** Extremely irritating with possible permanent eye injury.

**CHRONIC/ACUTE EFFECTS OF EXPOSURE:** Combinations of above conditions can be experienced.

### EMERGENCY & FIRST AID PROCEDURES

**EYE CONTACT:** In case of eye contact, flush well with water. Get medical attention immediately.

**SKIN CONTACT:** In case of skin contact, clean with soap and water. Do not use solvents. Remove contaminated clothing.

**INGESTION:** Get medical attention immediately.

**INHALATION:** Remove employee to fresh air. If discomfort persists, get medical attention.

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## VI. SPILL OR LEAK PROCEDURES

**STEPS TO BE TAKEN IN CASE MATERIAL IS SPILLED:** Eliminate ignition sources. Use eye and skin protection. Place leaking containers in a well ventilated area. Absorb spillage with inert material and dispose.

**WASTE DISPOSAL METHOD:** Incinerate or use hazardous waste treatment procedures that are in accordance with federal, state and local regulations.

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## VII. SPECIAL PROTECTION INFORMATION

**RESPIRATORY PROTECTION:** Wear an approved respirator whenever high level exposure to vapors or mist is anticipated.

**VENTILATION:** Local exhaust recommended for exposure control.

**PROTECTIVE GLOVES:** Impervious gloves - neoprene or equivalent. A combination of barrier cream and gloves is recommended.

**EYE PROTECTION:** Chemical splash goggles recommended.

**OTHER PROTECTIVE EQUIPMENT:** For operations where contact can occur, use a face shield and impervious apron. A safety shower and eye wash facility should be available.

**VIII. SPECIAL PRECAUTIONS:** Avoid contact with skin and eyes. Avoid breathing vapors. Keep containers closed when not in use. Remove all contaminated clothing immediately and wash. Wash skin thoroughly with soap and water after handling. Solvents should not be used to clean skin because of increased penetration potential - protective skin oils can be dissolved by solvents.

**MATERIAL SAFETY DATA SHEET****PRODUCT NAME: EPO-TEK 301, Part B****\*HMIS: HEALTH- 3 FIRE- 1 REACTIVITY – 0****Carcinogen: NTP (No) IARC (No) OSHA (No)**

\*HMIS CODE ratings are estimated by Epoxy Technology.

**EPOXY TECHNOLOGY****14 FORTUNE DRIVE  
BILLERICA, MA 01821****EMERGENCY PHONE:**

US/CANDA: 800-255-3924

INT'L COLLECT: + 813-248-0585

**DATE REVISED: 10/8/2004****REV: D**

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**I. IDENTIFICATION & PHYSICAL DATA****PERCENT VOLATILE:** Not volatile**BOILING POINT:** 448F@1013 Mbar**VAPOR DENSITY:** Heavier than air**APPEARANCE:** Colorless liquid**ODOR:** Pungent**VAPOR PRESSURE:** 0.02 hpa @ 20C**SOLUBILITY IN WATER:** Low**EVAPORATION RATE:** Slower than Butyl Acetate**SPECIFIC GRAVITY:** <1

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**II. HAZARDOUS INGREDIENTS****CAS#****WT%****TOXICITY DATA**

2,2,4-Trimethyl-1, 6-Hexanediamine

003236-53-1

75-100%

See Ingredient Sheet 210110.

2,2,4-Trimethyl-1, 6-Hexanediamine is the only ingredient that requires reporting under Sara Title III, under sections 311 and 312.

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**III. FIRE & EXPLOSION DATA****FLASH POINT:** >200F**EXTINGUISHING MEDIA:** Dry chemical, foam, carbon dioxide.**UNUSUAL FIRE & EXPLOSION HAZARDS:** Avoid fumes liberated by heat.**SPECIAL FIRE FIGHTING PROCIDURES:** Wear self contained breathing apparatus and complete personal protective equipment. Remove all ignition sources. Use a water spray to cool fire exposed containers.

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**IV. REACTIVITY DATA****STABILITY:** Stable**HAZARDOUS POLYMERIZATION:** Will not occur.**CONDITIONS TO AVOID:** Excessive heat.**MATERIALS TO AVOID:** Strong oxidizing and reducing agents.**HAZARDOUS DECOMPOSITION PRODUCTS:** Fumes produced when heated to decomposition may include carbon monoxide, carbon dioxide, and oxides of nitrogen.

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**EFFECTS OF OVER EXPOSURE**

**INGESTION:** Contains materials that may be moderately toxic. Ingestion can severely upset the gastric system.

**INHALATION:** Hot vapors can cause headaches, nausea, dizziness, and respiratory irritation, if inhaled.

**SKIN CONTACT:** Corrosive; expected to cause severe skin damage with burns and blistering.

**EYE CONTACT:** Extremely irritating with possible permanent eye injury.

**CHRONIC/EFFECTS OF EXPOSURE:** Combinations of above conditions can be experienced.

**EMERGENCY & FIRST AID PROCEDURES**

**EYE CONTACT:** In case of eye contact, flush well with water. Get medical attention immediately.

**SKIN CONTACT:** In case of skin contact, flush well with water. Do not use solvents. Remove contaminated clothing.

**INGESTION:** Get medical attention immediately.

**INHALATION:** Remove employee to fresh air. If discomfort persists, get medical attention.

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**VI. SPILL OR LEAK PROCEDURES**

**STEPS TO BE TAKEN IN CASE MATERIAL IS SPILLED:** Eliminate ignition sources. Use eye and skin protection. Place leaking containers in a well ventilated area. Absorb spillage with inert material and dispose.

**WASTE DISPOSAL METHOD:** Incinerate or use hazardous waste treatment procedures that are in accordance with federal or state and local regulations.

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**VII. SPECIAL PROTECTION INFORMATION**

**RESPIRATORY PROTECTION:** Wear an approved respirator whenever high level exposure to vapors or mist is anticipated.

**VENTILATION:** Local exhaust recommended for exposure control.

**PROTECTIVE GLOVES:** Impervious gloves – neoprene or equivalent. A combination of barrier cream and gloves is recommended.

**EYE PROTECTION:** Chemical splash goggles recommended.

**OTHER PROTECTIVE EQUIPMENT:** For operations where contact can occur, use a face shield and impervious apron. A safety shower and eye wash facility should be available.

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- VIII. SPECIAL PRECAUTIONS:** Avoid contact with skin and eyes. Avoid breathing vapors. Keep containers closed when not in use. Remove all contaminated clothing immediately and wash. Wash skin thoroughly with soap and water after handling. Solvents should not be used to clean skin because of increased penetration potential- protective skin oils can be dissolved by solvents.

## REGULATORY INFORMATION

**PRODUCT NAME:** EPO-TEK 301  
**DATE REVISED:** 2/26/01  
**REV:** A

**EPOXY TECHNOLOGY**  
**14 FORTUNE DRIVE**  
**BILLERICA, MA 01821**  
**Tel: (978) 667-3805**

### SARA TITLE III SECTION 313 SUPPLIER NOTIFICATION

This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right To Know Act of 1986 (40 CFR 372): None

#### 1. TSCA Inventory Status

All the components of this product are listed on the TSCA Inventory.

#### 2. RCRA Status

This product contains the following chemicals listed on the 40 CFR Part 261.33: None

#### 3. CERCLA Status

This product contains the following chemicals listed on the 40 CFR Part 302.4: None

#### 4. Transportation

Part A

Not Restricted

Part B

DOT/IATA Shipping Name: Trimethylhexamethylenediamines  
Hazard Class: 8  
Packing Group: III  
ID Number: UN2327  
Transport Label(s): Corrosive Liquid

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The information contained herein is given in good faith. However, no guarantee or warranty of any kind expressed or implied is made with respect to this information.

**INGREDIENT SHEET****EPOXY TECHNOLOGY  
14 FORTUNE DRIVE  
BILLERICA, MA 01821****PRODUCT NAME:** Reaction product of epichlorohydrin & bisphenol A  
**INGREDIENT CODE NUMBER:** 110104**EMERGENCY PHONE:**  
US/CANDA: 800-255-3924  
INT'L COLLECT: + 813-248-0585**\*HMIS: HEALTH (1) FLAMMIBILITY (1)  
REACTIVITY (1)****DATE ISSUED:** 02/28/2003**CARCINOGEN: NTP (No) IARC (No) OSHA (No)****\*HMIS CODE** rating are estimated by Epoxy Technology

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**I. IDENTIFICATION & PHYSICAL DATA**

Color: Colorless to slight Yellow  
Odor: Slight  
Physical State: Liquid  
Solubility in Water: None  
Vapor Pressure: NA  
Specific Gravity: 1.16  
Boiling Point: NA

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**II. HAZARDOUS INGREDIENTS****WT %****CAS #**

Reaction product of epichlorohydrin &amp; Bisphenol A

100%

025085-99-8

**TOXICITY DATA**

Skin(LD50): in rabbits is 20,000mg/kg.  
Ingestion(LD50): in rats is >5000mg/kg  
Mutagenicity: Animal mutagenicity, studies were negative.

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**III. FIRE AND EXPLOSION DATA****FLASH POINT:** 485 F**EXTINGUISHING MEDIA:** Foam, CO2, dry chemical.**UNUSUAL FIRE AND EXPLOSION HAZARDS:** None Known**FIRE FIGHTING EQUIPMENT:** Wear positive pressure self-contained breathing apparatus and full protective equipment.

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**IV. REACTIVITY DATA****STABILITY:** Stable**CONDITIONS TO AVOID:** Avoid storage at high temperatures.**HAZARDOUS DECOMPOSITION PRODUCTS:** None Known.**HAZARDOUS POLYMERIZATION:** Will not occur

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V. **HEALTH HAZARD DATA**

110104

**EFFECTS OF OVER EXPOSURE**

None Established.

**EMERGENCY & FIRST AID PROCEDURES**

**EYE CONTACT:** Flush eyes with plenty of water.

**SKIN CONTACT:** Wash off in flowing water or shower.

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

**INHALATION:** No adverse effects anticipated by this route of exposure.

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VI. **SPILL OR LEAK PROCEDURES**

**STEPS TO BE TAKEN IN CASE MATERIAL IS SPILLED:** Soak up in absorbent material such as sand, or polypropylene or polyethylene fiber products and collect in suitable containers. Residual resin may be removed using steam or hot soapy water.

**WASTE DISPOSAL METHOD:** Employ waste disposal procedures that are in accordance with federal, state and local regulations.

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VII. **SPECIAL PROTECTION INFORMATION**

**RESPIRATORY PROTECTION:** Wear an approved respirator whenever exposure to air born vapors are anticipated.

**VENTILATION:** Local exhaust recommended for exposure control.

**PROTECTIVE GLOVES:** Impervious gloves-neoprene or equivalent. A combination of barrier cream and gloves is recommended.

**EYE PROTECTION:** Chemical splash goggles recommended.

**OTHER PROTECTIVE EQUIPMENT:** For operations where contact can occur, use a face shield and impervious apron. A safety shower and eye wash facility should be available.

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VIII. **SPECIAL PRECAUTIONS:** Avoid contact with skin and eyes. Avoid breathing vapors generated by heating. Keep containers closed when not in use. Remove all contaminated clothing and wash.

**INGREDIENT SHEET****EPOXY TECHNOLOGY  
14 FORTUNE DRIVE  
BILLERICA, MA 01821****PRODUCT NAME:** 2,2,4 Trimethyl-1, 6-hexanedamine  
**INGREDIENT CODE NUMBER:** 210110**EMERGENCY PHONE:**  
US/CANDA: 800-255-3924  
INT'L COLLECT: + 813-248-0585**\*HMIS: HEALTH (3) FLAMMIBILITY (1)      REACTIVITY (0)****DATE ISSUED:** 9/15/00**CARCINOGEN: NTP (No) IARC (No) OSHA (No)****\*HMIS CODE rating are estimated by Epoxy Technology**

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**I. IDENTIFICATION & PHYSICAL DATA**Color: Clear  
Physical State: Liquid  
Vapor Pressure: NA  
Boiling Point: 232COdor: Amine  
Solubility in Water: NA  
Specific Gravity: 0.865

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**II. HAZARDOUS INGREDIENTS****WT%****CAS#**

2,2,4-Trimethyl-1, 6-hexanediamine

100%

003236-53-1

**TOXICITY DATA (AQUATIC)**LC50(Fish) 0.5 mg/l 48H  
EC10(Bacteria) 89mg/l 17H  
EC50 (Daphnia) 31.5 mg/l 24H  
EC50 (Algae) 29.5mg/l 72H

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**III. FIRE AND EXPLOSION DATA****FLASH POINT:** 230F**EXTINGUISHING MEDIA:** Carbon dioxide, foam, dry chemical, water spray.**UNUSUAL FIRE AND EXPLOSION HAZARDS:** None**FIRE FIGHTING EQUIPMENT:** None

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**IV. REACTIVITY DATA****STABILITY:** Stable**CONDITIONS TO AVOID:** Avoid storage at high temperatures.**HAZARDOUS DECOMPOSITION PRODUCTS:** Burning may produce irritating vapors and/or carbon monoxide**HAZARDOUS POLYMERIZATION:** Will not occur

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**EFFECTS OF OVER EXPOSURE**

**INGESTION:** May injure eye tissue and result in permanent damage. Corrosive. Causes chemical burns.

**INHALATION:** Corrosive. May cause burns resulting in permanent damage.

**SKIN CONTACT:** May cause burns resulting in permanent damage. Causes skin sensitization, an allergic reaction, which becomes evident on re-exposure to this material.

**EYE CONTACT:** Irritating to the eyes. May injure eye tissue and result in permanent damage. Corrosive. Causes chemical burns.

**CHRONIC EFFECTS OF OVER EXPOSURE:** No specific information available. Material is considered to be a potential carcinogen.

**EMERGENCY & FIRST AID PROCEDURES**

**EYE CONTACT:** In case of eye contact, flush with water for at least 15 minutes or until all material has been removed. Obtain medical attention without delay, preferably from an ophthalmologist.

**SKIN CONTACT:** Immediately flush skin with plenty of water. Remove contaminated clothing. Obtain medical attention if irritation develops or persists. Wash clothing before reuse.

**INGESTION:** Aspiration of material into the lungs may cause chemical pneumonitis (damage to lungs) which may be fatal. If swallowed, do not induce vomiting. Have person drink 8-10 glasses of water to dilute material in stomach. Get medical attention immediately.

**INHALATION:** Remove employee to fresh air. If breathing is difficult, give oxygen. If unconscious, evaluate the need for artificial respiration. Get immediate medical attention.

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**VI. SPILL OR LEAK PROCEDURES**

**STEPS TO BE TAKEN IN CASE MATERIAL IS SPILLED:** Avoid personal contact. Take up with absorbent material and shovel into a closed container.

**WASTE DISPOSAL METHOD:** Employ waste disposal procedures that are in accordance with federal, state and local regulations.

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**VII. SPECIAL PROTECTION INFORMATION**

**RESPIRATORY PROTECTION:** A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 or applicable federal/provincial requirements must be followed whenever workplace conditions warrant respirator use. NIOSH's "Respirator Decision Logic" may be useful in determining the suitability of various types of respirators.

**VENTILATION:** Local exhaust recommended for exposure control.

**PROTECTIVE GLOVES:** Impervious gloves-neoprene or equivalent. A combination of barrier cream and gloves is recommended.

**EYE PROTECTION:** Chemical splash goggles should be used.

**OTHER PROTECTIVE EQUIPMENT:** For operations where contact can occur, use a face shield and impervious apron. A safety shower and eye wash facility should be available.

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**VIII. SPECIAL PRECAUTIONS:** Avoid contact with skin and eyes. Avoid breathing vapors generated by heating. Keep containers closed when not in use. Remove all contaminated clothing and wash.