

**MATERIAL SAFETY DATA SHEET****PRODUCT NAME:** EPO-TEK H31LV  
Single Component**\*HMIS:** HEALTH- 2 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/CANADA: 800-255-3924  
INT'L COLLECT: + 813-248-0585**DATE REVISED:** 6/4/01  
**REV:** A

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

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**II. HAZARDOUS INGREDIENTS**

|                             | <b>CAS#</b> | <b>WT %</b> | <b>TOXICITY DATA</b>         |
|-----------------------------|-------------|-------------|------------------------------|
| Silver Flake                | 7440-22-4   | 35-55%      | See Ingredient Sheet 310200. |
| Resorcinol Diglycidyl Ether | 101-90-6    | 35-55%      | See Ingredient Sheet 110309  |

Silver Flake requires reporting per Sara Title III, under section 313. Resocinol Diglycidyl Ether requires reporting via 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 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, carbon dioxide, and oxides of nitrogen.

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## V. HEALTH HAZARD DATA

EPO-TEK H31LV

### EFFECTS OF OVER EXPOSURE

**INGESTION:** Contains materials that may be moderately toxic.

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

**SKIN CONTACT:** Can cause irritation and dermatitis.

**EYE CONTACT:** Irritating to the eyes. Can cause injury.

**CHRONIC EFFECTS OF OVER EXPOSURE:** No specific information available.  
Can cause dermatitis and sensitization

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### EMERGENCY & FIRST AID PROCEDURES

**EYE CONTACT:** In case of eye contact, flush with water for at least 15 minutes.  
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 NIOSH 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**

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

**PRODUCT NAME:** EPO-TEK H31LV  
**DATE REVISED:** 6/4/01  
**REV:** A

**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): Silver Flake as reported above.

**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**

Not Restricted

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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****INGREDIENT CODE NUMBER:** 310200**\*HMIS: HEALTH- 1 FIRE- 0 REACTIVITY- 0****EMERGENCY PHONE:**

US/CANADA: 800-255-3924

INT'L COLLECT: + 813-248-0585

**Carcinogen: NTP (No) IARC (No) OSHA (No)****DATE ISSUED:** 12/29/99

\* HMIS CODE ratings are estimated by Epoxy Technology.

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**I. IDENTIFICATION & PHYSICAL DATA****PERCENT VOLATILE:** <0.5 %**BOILING POINT:** NA**VAPOR DENSITY:** >Air**APPEARANCE:** Fine powder - Silver color**ODOR:** Mild**VAPOR PRESSURE:** NA**SOLUBILITY IN WATER:** Nil**EVAPORATION RATE:** NA**SPECIFIC GRAVITY:** 10.5

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

Silver flake

7440-22-4

100

**TOXICITY DATA**

ACGIH TLV (TWA) = 0.10 mg/M3

OSHA PEL (TWA) = 0.01 mg/M3

Silver appears in the Mass. RTK Hazardous substance list.

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**III. FIRE & EXPLOSION DATA****FLASH POINT:** >200F**EXTINGUISHING MEDIA:** Non Flammable**UNUSUAL FIRE & EXPLOSION HAZARDS:** None**SPECIAL FIRE FIGHTING PROCEDURES:** None

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**IV. REACTIVITY DATA****STABILITY:** Stable**HAZARDOUS POLYMERIZATION:** Will not occur.**CONDITIONS TO AVOID:** NA**MATERIALS TO AVOID:** NA**HAZARDOUS DECOMPOSITION PRODUCTS:** NA

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To the best of our knowledge, the information contained herein is accurate. Epoxy Technology Inc., however, assumes no liability for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

**EFFECTS OF OVER EXPOSURE**

**INGESTION:** No specific information available.

**INHALATION:** Prolonged or severe exposure to dust may produce respiratory irritation. The use of NIOSH approved respirators and effective, local exhaust ventilation can minimize this type of exposure.

**SKIN CONTACT:** Prolonged or repeated contact may result in irritation.

**EYE CONTACT:** Irritating to the eyes. The use of chemical splash goggles will prevent this form of contact.

**CHRONIC EFFECTS OF OVER EXPOSURE:** Prolonged or repeated exposure to silver dust can result in Pneumoconiosis and/or permanent skin pigmentation (Argyria).

**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:** Vacuum or sweep up dust. Follow good housekeeping procedures.

**WASTE DISPOSAL METHOD:** 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 a NIOSH approved respirator whenever high level exposure to air born particles 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 air born particles. 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:** Resorcinol Diglycidyl Ether**INGREDIENT CODE NUMBER:** 110309**\*HMIS: HEALTH (3) FLAMMIBILITY (1)  
REACTIVITY (1)****CARCINOGEN: NTP (No) IARC (No) OSHA (No)**

\*HMIS CODE rating are estimated by Epoxy Technology

**EMERGENCY PHONE:**

US/CANADA: 800-255-3924

INT'L COLLECT: + 813-248-0585

**DATE REVISED:** 5/2/01**REV:** B

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**I. IDENTIFICATION & PHYSICAL DATA**Color: Light Yellow  
Odor: Slight  
Physical State: Epoxy Liquid  
Solubility in Water: Negligible  
Vapor Pressure: NA  
Specific Gravity: 1.21  
Boiling Point: [0.8mmHg@172](#) deg C

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**II. HAZARDOUS INGREDIENTS**

|            | <b>WT%</b> | <b>CAS</b> |
|------------|------------|------------|
| Resorcinol | 100%       | 101-90-6   |

**TOXICITY DATA**Skin: NA  
Eye: NA  
Oral:LD50: 2570mg/kg (rat)  
Inhalation:LC50: NA

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**III. FIRE AND EXPLOSION DATA****FLASH POINT:** >250F  
**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:** Ingestion can cause severe irritation and gastric system disturbances.

**INHALATION:** Inhalation of vapors can cause severe respiratory irritation. This type of exposure can be avoided with effective, local exhaust ventilation.

**SKIN CONTACT:** Can cause severe irritation and sensitivity. This type of exposure can be minimized by complying with the recommended controls outlined in Section VII.

**EYE CONTACT:** Severe irritant to the eyes. Can cause injury. This type of contact can be eliminated through the use of chemical splash goggles.

**CHRONIC EFFECTS OF OVER EXPOSURE:** Can cause dermatitis and sensitization. Resorcinol Diglycidyl Ether is a suspected carcinogen.

**EMERGENCY & FIRST AID PROCEDURES**

**EYE CONTACT:** In case of eye contact, flush with water for at least 15 minutes. Get medical attention immediately.

**SKIN CONTACT:** Wash immediately with plenty of soap and water. Take off contaminated clothing and shoes.

**INGESTION:** Remove visible material, clean the face with water; lay down quiet and seek medical advice immediately.

**INHALATION:** Can be severely irritating to the respiratory tract. Get medical attention if discomfort persists.

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**VI. SPILL OR LEAK PROCEDURES**

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

**WASTE DISPOSAL METHOD:** 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 a

**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.