



**EFFECTS OF OVEREXPOSURE**

**INGESTION:** No specific information available.

**INHALATION:** No specific information available.

**SKIN CONTACT:** Contains corrosive constituent. May cause dermatitis in some individuals.

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

**CHRONIC EFFECTS OF OVER EXPOSURE:** No specific information available.  
See Ingredient 110201 and 3102002.

**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 for organic vapors 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, applied before exposure, and gloves is recommended. Do not apply cream after exposure.

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

**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.

**MATERIAL SAFETY DATA SHEET****PRODUCT NAME:** Epo Tek EE165-3, Part B**EPOXY TECHNOLOGY  
14 FORTUNE DRIVE  
BILLERICA, MA 01821****\*HMIS: HEALTH- 2 FIRE-1 REACTIVITY- 1****EMERGENCY PHONE:  
(978) 667 3805****Carcinogen: NTP (No) IARC (No) OSHA (No)****DATE REVISED: 10/18/00**

\* HMIS CODE ratings are estimated by Epoxy Technology.

**REV: B**

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

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

There are no hazardous ingredients that require reporting per OSHA's Hazardous Communication Standards or by Sara Title III.

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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 oxides of nitrogen, carbon monoxide, and carbon dioxide.

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## V. HEALTH HAZARD DATA

Epo Tek EE165-3, Part B

### 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:** Contains corrosive constituent; expected to cause severe skin damage with burns and blistering.

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

**CHRONIC EFFECTS OF OVER 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:** Do not induce vomiting. Give large quantities of water. Get medical attention immediately.

**INHALATION:** Can be irritating to respiratory track. Remove to fresh air. 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 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 for organic vapors 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 must be worn.

**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.

**REGULATORY INFORMATION**

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

**PRODUCT NAME:** EE165-3  
**DATE:** 10/18/00

**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

**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

Not Restricted

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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.

**MATERIAL SAFETY DATA SHEET**

**EPOXY TECHNOLOGY  
14 FORTUNE DRIVE  
BILLERICA, MA 01821**

**PRODUCT NAME:** Silver Flake  
**INGREDIENT CODE NUMBER:** 310200

**EMERGENCY PHONE:**  
(978) 667 3805

**\*HMIS: HEALTH- 1 FIRE- 0 REACTIVITY- 0**  
**\*ANSI CODE: 1**  
**Carcinogen: NTP (No) IARC (No) OSHA (No)**

**DATE ISSUED:** 12/29/99

\* HMIS and ANSI 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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<b>II. HAZARDOUS INGREDIENTS</b>	<b>CAS#</b>	<b>WT %</b>	<b>TOXICITY DATA</b>
Silver flake	7440-22-4	100	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:** Bisphenol F  
**INGREDIENT CODE NUMBER:** 110201**EMERGENCY PHONE:**  
(978) 667 – 3805**\*HMIS: HEALTH (2) FLAMMIBILITY (1)  
REACTIVITY (0)****DATE ISSUED:** 8/18/00**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  
Odor: Slight  
Physical State: Liquid  
Solubility in Water: Insoluble  
Vapor Pressure: <0.01 mm Hg@20°C  
Specific Gravity: 1.19  
Boiling Point: >200°C

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<b>II. HAZARDOUS INGREDIENTS</b>	<b>WT%</b>	<b>CAS</b>	<b>TOXICITY DATA</b>
Bisphenol F	100%	28064-14-4	Acute Oral Effects (LD50): Rat: >10,000mg/kg Acute Dermal Toxicity (LD50): Rabbit: 3,000mg/ Inhalation Toxicity (LC50): LCLO=1.7mg ¼hrs

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**III. FIRE AND EXPLOSION DATA****FLASH POINT:** >200F**EXTINGUISHING MEDIA:** Carbon dioxide, foam, dry chemical, water spray.**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Decomposition and combustion products may be toxic.**FIRE FIGHTING EQUIPMENT:** Use self-contained breathing apparatus.

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**IV. REACTIVITY DATA****STABILITY:** Stable**CONDITIONS TO AVOID:** Avoid strong acids or bases in bulk and elevated temperatures.**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon monoxide, carbon dioxide, aldehydes.**HAZARDOUS POLYMERIZATION:** Will not occur

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**V. HEALTH HAZARD DATA****EFFECTS OF OVER EXPOSURE**

**INGESTION:** No specific information available.

**INHALATION:** No specific information available.

**SKIN CONTACT:** May cause skin irritation, dermatitis.

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

**CHRONIC EFFECTS OF OVER EXPOSURE:** May cause dermatitis if it gets on your skin.

**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:** 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:** 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.