I.  IDENTIFICATION & PHYSICAL DATA

PERCENT VOLATILE: NA
BOILING POINT: NA
VAPOR DENSITY: >Air
APPEARANCE: Silver Paste
ODOR: Mild

II.  HAZARDOUS INGREDIENTS

<table>
<thead>
<tr>
<th>CAS #</th>
<th>WT %</th>
</tr>
</thead>
<tbody>
<tr>
<td>7440-22-4</td>
<td>50-70%</td>
</tr>
<tr>
<td>28064-14-4</td>
<td>30-50%</td>
</tr>
</tbody>
</table>

TOXICITY DATA:
- ACGIH TLV (TWA) = 0.10 mg/m³
- OSHA PEL (TWA) = 0.01 mg/m³

Epoxy Phenol Novolac

TOXICITY DATA:
- Acute Oral Effects (LD50): Rat > 10,000 mg/kg
- Inhalation Toxicity (LD50): LC50 = 1.7 mg
- Acute Dermal Toxicity (LD50): Rabbit 3,000 mg

Silver Flake requires reporting per Sara Title III, under section 313. Bisphenol F is the only ingredient that requires reporting according to OSHA’s Hazardous Communication Standards.

III.  FIRE & EXPLOSION DATA

FLASH POINT: >200°F
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.

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.

The information and recommendations contained in this Material Safety Data Sheet have been compiled from sources believed to be reliable and to represent the most reasonable current opinion of the subject when the MSDS was prepared. No warranty, guarantee, or representation is made as to the correctness or sufficiency of the information. The user of this product must decide what measures are necessary to safely use this product, either alone or in the combination with other products, and to determine its environmental the combination with other products, and to determine its environmental regulatory compliance obligations under applicable federal or state laws.
V. HEALTH HAZARD DATA

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

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.

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.

VII. SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: Wear an NIOSH approved respirator whenever high level exposure to vapors or mist is anticipated.
VENTILATION: Locale 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.
I. IDENTIFICATION & PHYSICAL DATA

PERCENT VOLATILE: NA
BOILING POINT: NA
VAPOR DENSITY: >Air
APPEARANCE: Silver Paste
ODOR: Mild

II. HAZARDOUS INGREDIENTS

<table>
<thead>
<tr>
<th>CAS #</th>
<th>WT %</th>
</tr>
</thead>
<tbody>
<tr>
<td>7440-22-4</td>
<td>70-95%</td>
</tr>
</tbody>
</table>

TOXICITY DATA:
ACGIH TLV (TWA) = 0.10 mg/m³
OSHA PEL (TWA) = 0.01 mg/m³

Silver Flake requires reporting per Sara Title III, under section 313.

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.

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.

The information and recommendations contained in this Material Safety Data Sheet have been compiled from sources believed to be reliable and to represent the most reasonable current opinion of the subject when the MSDS was prepared. No warranty, guarantee, or representation is made as to the correctness or sufficiency of the information. The user of this product must decide what measures are necessary to safely use this product, either alone or in the combination with other products, and to determine its environmental the combination with other products, and to determine its environmental regulatory compliance obligations under applicable federal or state laws.
**V. HEALTH HAZARD DATA**

**EFFECTS OF OVER EXPOSURE**

**INGESTION:** Ingestion may result in severe gastric disturbances. Gastrointestinal damage may result.

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

**SKIN CONTACT:** Mildly irritating in rabbit dermal irritation studies. May cause dermatitis and skin sensitization in some individuals.

**EYE CONTACT:** Causes eye burns in rabbit irritation studies. Irritating to the eyes. Can cause injury.

**CHRONIC EFFECTS OF OVER EXPOSURE:** In a single dose, this product may be toxic by ingestion. Irritation of the mouth, pharynx, and esophagus can develop following ingestion.

**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.

---

**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.

---

**VII. SPECIAL PROTECTION INFORMATION**

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

**VENTILATION:** Locale 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.
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 listed 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

   Part A

   Not Restricted

   Part B

   Not Restricted

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.