**1. PRODUCT IDENTIFICATION**

<table>
<thead>
<tr>
<th>MANUFACTURER NAME</th>
<th>Magnesium Elektron, Inc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADDRESS</td>
<td>500 Point Breeze Road, Flemington, NJ</td>
</tr>
<tr>
<td>TRADE NAME</td>
<td>Tin Oxide</td>
</tr>
<tr>
<td>SYNONYMS</td>
<td>Tin (IV) Oxide, Cassiterite</td>
</tr>
<tr>
<td>CAS NUMBER</td>
<td>18282-10-5</td>
</tr>
<tr>
<td>REGULAR PHONE NO. (908)782-5800</td>
<td>Emergency Telephone No. (908)782-5800</td>
</tr>
</tbody>
</table>

**2. HAZARDOUS INGREDIENTS**

<table>
<thead>
<tr>
<th>MATERIAL OR COMPONENT</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tin Oxide (as SnO2)</td>
<td>100%</td>
</tr>
</tbody>
</table>

**3. PHYSICAL DATA**

<table>
<thead>
<tr>
<th>PROPERTY</th>
<th>VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling Point (°C)</td>
<td>1800-1900°C</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>6.95</td>
</tr>
<tr>
<td>Vapor Pressure (mm Hg.)</td>
<td>ND</td>
</tr>
<tr>
<td>Melting Point (°C)</td>
<td>1630</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Insoluble</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>ND</td>
</tr>
</tbody>
</table>

**Appearance and Odor**

White or slightly grey powder with no odor

**4. FIRE AND EXPLOSION DATA**

<table>
<thead>
<tr>
<th>PROPERTY</th>
<th>VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Point (Test Method)</td>
<td>Not flammable</td>
</tr>
<tr>
<td>Flammable Limits in Air. % by Vol.</td>
<td>Not Flammable</td>
</tr>
<tr>
<td>Lower</td>
<td>N/A</td>
</tr>
<tr>
<td>Upper</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Extinguishing Media**

Use Media suitable for surrounding fires, this material is not flammable

**Special Fire Fighting Procedures**

None Known

**Unusual Fire and Explosion Hazard**

None Known

**5. HEALTH HAZARD INFORMATION**

**First Aid:**

**EYES:**
Flush eyes with running water for at least 15 minutes. If irritation persists, seek medical aid.

**SKIN:**
Flush affected area with water. If irritation persists seek medical aid.

**INHALATION:**
Remove to fresh air. If breathing has stopped administer artificial respiration, seek medical aid immediately.

**INGESTION:**
Wash mouth out with water. Do not induce vomiting, seek medical attention.

**EYES:**
Abrasive Material, treat as a foreign object

**NATURE OF HAZARD:**
Abrasive material, can cause irritation

**SKIN:**

**INHALATION:**
Chronic exposure to Tin Oxide fumes or dust may result in Stannosis, a form of Pneumoconiosis.

**INGESTION:**
Considered non-toxic by ingestion
# Effects of Overexposure

**Acute Overexposure**
- Coughing, Choking and Possibly irritating to respiratory tract.
- May result in Stannosis, a form of Pneumoconiosis.
  - Tin Oxide (as SnO₂) - NIOSH PEL:
    - 2.0 mg/m³ (TWA) IDLH - 400 mg/m³

**Threshold Limit Value (TLV)**

<table>
<thead>
<tr>
<th>Effect</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin Contact</td>
<td>Possible Irritant</td>
</tr>
<tr>
<td>Eye Contact</td>
<td>Abrasive, mild irritant</td>
</tr>
<tr>
<td>Inhalation</td>
<td>Possible respiratory irritant</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Considered non-toxic, NOT RECOMMENDED</td>
</tr>
</tbody>
</table>

## 6. Reactivity Data

**Conditions Contributing to Instability**
- Stable

**Incompatibility**
- Chlorine, Turpentine

**Hazardous Decomposition Products**
- None Known

**Conditions Contributing to Hazardous Polymerization**
- Not Applicable

## 7. Spill or Leak Procedures

**Steps to be Taken if Material is Released or Spilled**
- Take precautions to avoid creating and breathing dust. Dampen any spilled material, collect by vacuum or shovel and place into labeled container for disposal.

**Neutralizing Chemicals**
- None Required

**Waste Disposal Method**

## 8. Special Protection Information

**Ventilation Requirements**
- Use local exhaust ventilation to avoid inhaling dust.

**Specific Personal Protective Equipment**
- Skin contact should be prevented by protective clothing. In all areas of dust concentration, dust masks should be provided, and in case of fumes, masks with proper canisters or supplied air respirators should be used.

**Respiratory**
- NIOSH/MSHA Approved dust/particulate respirator is recommended.

**Eyes**
- Safety glasses as a minimum.

**Gloves**
- As with all chemicals, gloves should be worn to prevent excessive or repeated skin contact

**Other Clothing and Equipment**
- Long sleeve shirts or coveralls to minimize skin contact.

## 9. Special Precautions

**Hazard Classification Information** - Not Regulated under the Department of Transportation

**DOT Hazard Class:**

**UN Number:**

**Handling and Storage Materials and Coatings**
- Suitable: Store in a cool, dry place. Avoid contact with water.
- SARA TITLE III: Not Applicable
- TSCA: Tin Oxide is Listed on the TSCA Chemical Substance Inventory under CAS NO. 18282-10-5

**Document #557.05.000.85**

**Revision #2 – May 22, 2000**

JFB