



## MATERIAL SAFETY DATA SHEET

1. PRODUCT IDENTIFICATION			
MANUFACTURER'S NAME	Magnesium Elektron, Inc.		
ADDRESS	500 Point Breeze Road, Flemington, NJ		
TRADE NAME	Tin Oxide		
SYNONYMS	Tin (IV) Oxide, Cassiterite		
CAS NUMBER	18282-10-5		
REGULAR PHONE NO. (908)782-5800	Emergency Telephone No. (908)782-5800		
2. HAZARDOUS INGREDIENTS			
MATERIAL OR COMPONENT			
Tin Oxide (as SnO <sub>2</sub> )	100%		
3. PHYSICAL DATA			
BOILING POINT (°F)	Sublimes 1800-1900 °C	SPECIFIC GRAVITY	6.95
VAPOR PRESSURE (mm Hg.)	ND	MELTING POINT (°C)	1630
SOLUBILITY IN WATER	insoluble	VAPOR DENSITY	ND
APPEARANCE AND ODOR	White or slightly grey powder with no odor		
4. FIRE AND EXPLOSION DATA			
FLASH POINT (TEST METHOD)	Not flammable	AUTO IGNITION TEMPERATURE (°F)	Not Applicable
FLAMMABLE LIMITS IN AIR, % BY VOL. Not Flammable	LOWER	N/A	UPPER N/A
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 : SKIN:	Abrasive material, can cause irritation		
INHALATION:	Chronic exposure to Tin Oxide fumes or dust may result in Stannosis, a form of Pneumoconiosis.		
INGESTION:	Considered non-toxic by ingestion		

<p><b>EFFECTS OF OVEREXPOSURE</b></p> <p><b>ACUTE OVEREXPOSURE</b></p> <p><b>CHRONIC OVEREXPOSURE</b></p> <p><b>THRESHOLD LIMIT VALUE (TLV)</b></p>	<p>Coughing, Choking and Possibly irritating to respiratory tract.</p> <p>May result in Stannosis, a form of Pneumoconiosis.</p> <p>Tin Oxide (as SnO<sub>2</sub>) - NIOSH PEL :</p> <p>2.0 mg/m<sup>3</sup> (TWA) IDLH - 400 mg/m<sup>3</sup></p>
<p><b>SKIN CONTACT:</b></p>	<p>Possible Irritant</p>
<p><b>EYE CONTACT:</b></p>	<p>Abrasive, mild irritant</p>
<p><b>INHALATION:</b></p>	<p>Possible respiratory irritant</p>
<p><b>INGESTION:</b></p>	<p>Considered non-toxic, <b>NOT RECOMMENDED</b></p>
<p><b>6. REACTIVITY DATA</b></p>	
<p><b>CONDITIONS CONTRIBUTING TO INSTABILITY</b></p>	<p>Stable</p>
<p><b>INCOMPATIBILITY</b></p>	<p>Chlorine, Turpentine</p>
<p><b>HAZARDOUS DECOMPOSITION PRODUCTS</b></p>	<p>None Known</p>
<p><b>CONDITIONS CONTRIBUTING TO HAZARDOUS POLYMERIZATION</b></p>	<p>Not Applicable</p>
<p><b>7. SPILL OR LEAK PROCEDURES</b></p>	
<p><b>STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED</b></p>	<p>Take precautions to avoid creating and breathing dust. Dampen any spilled material, collect by vacuum or shovel and place into labeled container for disposal</p>
<p><b>NEUTRALIZING CHEMICALS</b></p>	<p>None Required</p>
<p><b>WASTE DISPOSAL METHOD</b></p>	<p>Not defined as a hazardous waste under 40 CFR Part 261 of the Resource Conservation and Recovery Act (RCRA).</p>
<p><b>8. SPECIAL PROTECTION INFORMATION</b></p>	
<p><b>VENTILATION REQUIREMENTS</b></p>	<p>Use local exhaust ventilation to avoid inhaling dust.</p>
<p><b>SPECIFIC PERSONAL PROTECTIVE EQUIPMENT</b></p>	<p>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.</p>
<p><b>RESPIRATORY:</b></p>	<p>NIOSH/MSHA Approved dust/particulate respirator is recommended.</p>
<p><b>EYES:</b></p>	<p>Safety glasses as a minimum.</p>
<p><b>GLOVES:</b></p>	<p>As with all chemicals, gloves should be worn to prevent excessive or repeated skin contact.</p>
<p><b>OTHER CLOTHING AND EQUIPMENT:</b></p>	<p>Long sleeve shirts or coveralls to minimize skin contact.</p>
<p><b>9. SPECIAL PRECAUTIONS</b></p>	
<p><b>HAZARD CLASSIFICATION INFORMATION</b> - Not Regulated under the Department of Transportation DOT Hazard Class UN Number:</p>	
<p><b>HANDLING AND STORAGE MATERIALS AND COATINGS</b> 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 #657.06.000.86 Revision #2 - May 22, 2000</p>	

JFB