

ZINC TELLURIDE

Section I

Kurt J. Lesker Company 1925 Worthington Avenue Clairton, PA 15025 Ph: 412/387-9200 Fax: 412/233-4275		Emergency Phone Numbers Chemtrec 800/424-9300 Poison Center 800/562-8236	
Chemical Name and Synonyms Zinc Telluride		Date of Last Revision 8/22/91	
Formula ZnTe	Chemical Family Metal Telluride	Chemical Abstract No. 1315-11-3	
TSCA Listed in the EPA TSCA inventory		Calc. Molecular Wt. 192.98	

Section II Hazardous Ingredients

Hazardous Ingredients	CAS #	%	TLV	OSHA PEL
Zinc Telluride	1315-11-3	100	0.1mg/m ³ (Te)	Not set

Section III Physical Data

Boiling Point (0°C): ND	Density (gmcc): 6.34 @ 15° C
Vapor Pressure: NA	% Volatile by Volume: NA
Reaction with Water: Prolonged contact yields H ₂ and H ₂ Te	Evaporation Rate (H ₂ O -1): NA
Solubility in Water: Decomposes	Melting Point (°C): 1238.5
Appearance and Odor: Grey or brownish-red powder; ruby-red crystals by sublimation	Other Comments:

Section IV Fire & Explosion Hazard Data

Flash Point (method) NA	Autoignition Temp. NA	Flammability Non-flammable	LEI NA	UEI NA
Extinguishing Media: Dry chemical, CO, or graphite				
Special Fire Fighting Procedures: Wear a self-contained breathing apparatus and full protective clothing to prevent contact with skin and eyes.				
Unusual Fire and Explosion Hazards: When heated to decomposition, it may emit toxic fumes.				

Section V Spill or Leak Process

Steps to be Taken in Case Material is Released or Spilled: Wear a self-contained breathing apparatus and full protective clothing. Isolate the area where the spill occurred and insure that proper ventilation is available. Vacuum up spill using a high efficiency unit and place in a container for

proper disposal. Take care not to raise dust.

Waste Disposal Method (Consult federal, state or local authorities for proper disposal procedures.): Dispose of in accordance with applicable federal, state and local regulations.

Section VI Health Hazard Data

<p>Toxicity Data</p> <p>no specific data for this compound</p> <p>Zn Data:</p> <p>skn-hmn 300 ug/3D-I:MLD</p> <p>ihl-hmn TCLO: 124mg/m³/50M:PUL</p> <p>Te Data:</p> <p>orl-rat TDLO: 3465mg/kg (1-21D preg)</p> <p>TFX:TER</p> <p>ims-rat LDLO: 200mg/kg</p> <p>itr-rat LDLO: 20mg/kg</p>	<p>HMIS Hazard Rating</p> <p>Health: 2*</p> <p>Flammability: 0</p> <p>Reactivity: 1</p> <p>Personal Protection:E</p>
<p>Route(s) of Entry Inhalation: X Skin: X Ingestion: X</p>	
<p>Effects of Overexposure (acute and chronic)</p> <p>Inhalation: May cause sneezing, coughing, difficulty breathing, nausea and irritation of the respiratory tract.</p> <p>Dermal: May cause irritation, itching and dermatitis</p> <p>Eye Contact: May cause burning sensation, irritation, redness and watering of the eyes if comes in contact.</p> <p>Other (specify): <u>Zinc Compounds</u>: Zinc is not inherently a toxic element. However, when heated it evolves a fume of zinc oxide which, when inhaled fresh, can cause a disease known as "brass founder", "ague" or "brass chills", sweet taste, throat dryness, cough weakness, generalized aching, fever, nausea and vomiting. Zinc oxide dust, which is not freshly formed, is virtually innocuous. There is noncumulative effect to the inhalation of zinc fumes. Workers in zinc refining have been reported as suffering from a variety of non-specific intestinal, respiratory and nervous symptoms. Ulceration of the nasal septus and eczematous dermatosis are also reported.</p> <p><u>Tellurium Compounds</u>: Impart a garlic-like odor to the breath and sweat. Heavy exposures may result in headache, drowsiness, metallic taste, loss of appetite and nausea. Various tellurium salts may also produce similar symptoms. Large doses can be fatal.</p>	
<p>Medical Conditions Generally Aggravated by Exposure: Respiratory and skin disorders</p>	
<p>Carcinogenicity: NTP: No IARC Monographs: No OSHA Regulations: No</p>	
<p>Emergency and First Aid Procedures</p> <p>Ingestion: Give 1-2 glasses of milk and induce vomiting. Seek medical attention.</p> <p>Inhalation: Remove victim to fresh air. Seek medical attention. Administer oxygen if breathing is difficult.</p> <p>Skin Contact: Brush material off skin. Wash affected area with soap and water. Seek medical attention.</p> <p>Eye Contact: Flush eyes with lukewarm water for 15 minutes. Seek medical attention.</p>	

Section VII Reactivity Data

Stable: X Unstable:	Conditions Contributing to Instability: Moisture
Incompatibility (materials to avoid):	
Hazardous Decomposition Products - Thermal and Other (list): H2, H2Te, Zn, Te	
Hazardous Polymerization May Occur: Will Not Occur: X	Conditions to Avoid: Hat, flame, moisture and incompatible materials.

Section VIII Special Protective Information

Respiratory Protection (specify type). Use Only Niosh Approved Equip. Wear NIOSH-approved dust-mist-fume cartridge respirator.	
Ventilation (always maintain exposure below permissible limits) Local Exhaust: Maintain exposure below TLV level for Te Mechanical (general): Not recommended Special: Handle in a controlled environment Other: NA	
Protective Gloves: Neoprene	Eye Protection: Safety Glasses
Other Protective Equipment/Work Practices: Wear protective clothing to prevent contamination of skin and clothes.	

Section IX Special Precautions

Precautions to be Taken in Handling and Storing: Store in tightly closed containers in a cool, dry place. Wash hands and face thoroughly after handling and before eating.
Transportation Requirements DOT Class: Not classified UN Number: Not classified IMCO Class: Not classified Other:

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ND = NO DATA FOUND NA = NOT APPLICABLE