

1050 Benson Way, Ashland, OR 97520 Toll Free (800) 638-2581 * Fax (541) 488-8313 E-Mail: sales@espimetals.com

MATERIAL SAFETY DATA SHEET

PRODUCT IDENTIFICATION

Chemical Name: Chemical Family: Sodium Telluride

Metal Telluride

Formula:

Na₂Te

CAS #:

12034-41-2

HAZARDOUS INGREDIENTS П

ACGIH/TLV Sec. 302 OSHA/PEL Sec. 304 **Hazardous Components** Sec. 313 $.1 \text{ mg/m}^3 \text{ (as Te)}$ Sodium Telluride 0 - 100.1 mg/m³ (as Te) Nο No

HM1S Ratings: Health: 2

Flammability: 0

Reactivity: 1

Protection: E: glasses, gloves, respirator

Ш PHYSICAL DATA

Boiling Point: Specific Gravity: N/E or N/A

2.90 gm/cc

Vapor Density:

No data

Decomposes with evolution of H₂Te.

Melting Point: Vapor Pressure: 953 °C No data

% Volatile:

N/E or N/A

Solubility in H2O:

Very soluble

Reaction with H2O: White hygroscopic powder and pieces, no odor. Decomposes in air. Appearance and Odor:

IV FIRE AND EXPLOSION DATA

Flash Point (Method Used): N/E or N/A Flammable Limits: Upper: N/A Lower: N/A Method Used: Non-flammable

Autoignition Temperature: No data

Extinguishing Media: Use suitable extinguishing media for surrounding materials and type of fire.

Special Firefighting Procedures: Firefighters must wear full face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. Fumes from fire are hazardous, Isolate runoff to prevent environmental pollution.

Unusual Fire and Explosion Hazard: When heated to decomposition, sodium telluride may emit toxic fumes of tellurium.

HEALTH HAZARD INFORMATION

Effects of Exposure:

To the best of our knowledge the chemical, physical and toxicological properties of sodium telluride have not been thoroughly investigated and recorded.

Sodium compounds have variable toxicity. Sodium ions as such is practically nontoxic.

Elemental tellurium has relatively low toxicity. It is converted in the body to dimethyl telluride which imparts a garlic-like odor to the breath and sweat. Heavy exposures may, in addition, result in headache, drowsiness, metallic taste, loss of appetite, nausea, tremors, convulsions, and respiratory arrest. (Sax, Dangerous Properties of Industrial Materials, eighth edition)

Acute and Chronic Effects:

Inhalation: May cause a dry mouth, garlic odor to breath, sweat, urine, anorexia, nausea, depression and somnolence.

Ingestion: May cause dry mouth, suppression of sweat, garlic odor to breath, urine, anorexia, nausea, depression and somnolence.

Skin: May cause irritation, itching, dermatitis.

Eye: May cause irritation.

Target Organs: May affect the skin and central nervous system.

Medical Conditions Generally Aggravated by Exposure: Pre-existing skin disorders.

Carcinogenicity: NTP? No IARC Monograph? No OSHA Regulated? No

EMERGENCY AND FIRST AID PROCEDURES:

INHALATION: Remove victim to fresh air, keep warm and quiet; give oxygen if breathing is difficult and seek medical attention. **INGESTION**: Give 1-2 glasses of milk or water and induce vomiting; seek medical attention. Never induce vomiting or give anything by mouth to an unconscious person.

SKIN: Brush off material, then flush affected area with plenty of water. If irritation persists, seek medical attention.

EYE: Flush eyes with plenty of water for at least 15 minutes. Seek medical attention if symptoms persist.

VI REACTIVITY DATA

Stability: Stable

Conditions to Avoid: None

Incompatibility (Material to Avoid): Moisture, acids.

Hazardous Decomposition Products: Fumes of tellurium.

Hazardous Polymerization: Will not occur.

VII SPILL OR LEAK PROCEDURES

Steps to Be Taken in Case Material is Spilled or Released: Wear appropriate respiratory and protective equipment specified in section VIII. Isolate spill area and provide ventilation. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for proper disposal. Take care not to raise dust.

Waste Disposal Method: Dispose of in accordance with Local, State and Federal regulations.

VIII SPECIAL PROTECTION INFORMATION

Respiratory Protection: NIOSH approved respirator.

Ventilation: Local exhaust ventilation may be necessary to control any air contaminants to within their PEL's or TLV's during the use of this product. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. General exhaust is not recommended.

Protective Gloves: Rubber gloves

Eye Protection: Safety glasses and goggles.

Other Protective Equipment: Protective gear suitable to prevent contamination.

IX SPECIAL PRECAUTIONS

Precautions to Be Taken in Handling and Storage: Store in a cool, dry area. Store in tightly sealed container. Wash thoroughly after handling.

Other Precautions: Sodium telluride decomposes in air. Handle and store in a controlled environment.

Work Practices: Implement engineering and work practice controls to reduce and maintain concentration of exposure at low levels. Use good housekeeping and sanitation practices. Do not use tobacco or food in work area. Wash thoroughly before eating and smoking. Do not blow dust off clothing or skin with compressed air. Maintain eyewash capable of sustained flushing, safety drench shower and facilities for washing.

DOT Class: Irritant UN Number: 3134 IMCO Class: NC

Other: This material may be flammable.

The above information is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. ESPI shall not be held liable for damages resulting from handling or from contact with the above product.

Issued by:

S. Dierks

Dated:

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