

Mercury telluride(HgTe) (cas 12068-90-5) MSDS

MATERIAL SAFETY DATA SHEET

I PRODUCT IDENTIFICATION

Trade Name: Mercury Telluride Chemical Nature: Metal Telluride
Formula: HgTe CAS #: 12068-90-5

II HAZARDOUS INGREDIENTS

None Identified

III PHYSICAL DATA

Boiling Point (oC): Unknown Melting Point: Unknown
Density (gm/cc): 8.085 Reaction with Water: None
Solubility in H₂O: Insoluble Other Comments: N/A
Appearance and Odor: Black powdered solid. No odor.

IV FIRE AND EXPLOSION HAZARDS DATA

Autoignition Temp (oC): N/A Flammability: LEL: N/A UEL: N/A
Flash Point (Method used): N/A

Special Fire Fighting Procedures: Wear SCBA when fighting chemical fires.
Extinguishing Media: None
Unusual Fire and Explosion Hazards: Contamination

V HEALTH HAZARD INFORMATION

Permissible Exposure Limit: OSHA PEL for mercury: 1 mg/m³ for inorganic mercury compounds (as Hg): 0.1 mg/m³ (skin).
OSHA PEL for tellurium compounds (as Te): 0.1 mg/m³ TLV for tellurium compounds (as Te): 0.1 mg/m³.

Irritation: Moderate skin and eye irritation.
Corrosivity: Unknown
Sensitization: Skin; Dermatitis may result from repeated contact.

Lung Effects: Inhaled mercurial compounds may cause headache, cough, chest pains and tightness and difficulty in breathing. It may also cause soreness in the mouth, nausea and diarrhea. Long term exposure may cause fine shakes, insomnia, excess salivation and numerous CNS effects.

Other: Skin contact can cause irritation and possible allergic-type dermatitis. Ingestion is not a primary route of exposure. Avoid all contact, especially inhalation. A chronic poison.

EMERGENCY AND FIRST AID PROCEDURES:

EYES: Flush with plenty of water for at least 15 minutes.
SKIN: Flush with soap and water.
INHALATION: Remove to fresh air. Get medical attention.
INGESTION: Induce vomiting. Seek medical attention.

VI REACTIVITY DATA

Stability: Stable

Incompatibility (Material to Avoid): No data

Hazardous Decomposition Products: Hg and Te fume upon heating to decomposition.

Hazardous Polymerization: Will not occur

Conditions to Avoid: No data

VII SPILL OR LEAK PROCEDURES

Steps to Be Taken in Case Material Is Released or Spilled: Sweep or scoop up and remove.

Waste Disposal Method: Dispose of in a approved hazardous waste landfill.

VIII SPECIAL PROTECTION INFORMATION

Respiratory Protection (Specify Type): Any respirator approved for dusts, fumes and mists.

Ventilation: Local exhaust.

Protective Gloves: Neoprene Eye Protection: Safety Glasses

Other Protective Equipment: Gloves, protective clothing to prevent skin contact or clothing contamination.

IX SPECIAL PRECAUTIONS

Other Handling and Storage Conditions:

DOT Hazard Class: Poison B

UN#: 1634

IMCO Class: 6.1

Precautionary Labeling: Wash thoroughly after handling. Do not get in eyes, on skin or clothing. Do not breath dust, vapor, mist, or gas. Keep container closed. Store in tightly closed containers. Empty container may contain hazardous waste residues. Poison.

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