

Material Safety Data Sheet

Identity: Germanium Telluride
Chemical Family: Metal Telluride

Formula: GeTe

Section I - General Information

Manufacturer: [Stanford Advanced Materials](#) (SAM)

The information below is believed to be accurate and represents the best information available to SAM. However, SAM makes no warranty, expressed or implied with respect to such information and we assume no liability resulting from its use.

Section II - Hazardous Ingredients/Identity Information

CAS #	%	OSHA/PEL	ACGIH/TLV
12025-39-7	100	N/E	0.2mg/m ³ (Te)

Section III - Physical/Chemical Characteristics

Boiling Point: ND	Specific Gravity (water=1):
Melting Point: 725 °C	Vapor Pressure: NA Physical
States: Solid	Vapor Density: NA
Evaporation Rate: NA	Solubility in water: None, may form H ₂ Te
	Percent Volatile: NA

Appearance and odor: Silver gray metallic pieces, odorless

Section IV - Fire and Explosion Hazard Data:

Flash Point: NA

Extinguishing Media:

Do not use water. Use dry chemical CO₂

Unusual Fire Explosion Hazard: When heated to decomposition, it may emit toxic fumes. May emit H₂Te on contact with water, moisture, etc.

Section V - Reactivity Data

Stability: Stable

Conditions to Avoid: Heat, flame, incompatible materials

Incompatibility - Materials to Avoid: Strong acids, strong bases, oxidants, water/moisture.

Decompositions: Ge, GeO_x, Te, TeO_x, H₂Te

Hazard Polymerization: Will not occur.

Section VI - Health Hazard Data

Routes of entry: Ingestion, inhalation, skin contact, eye contact.

Carcinogenicity: NTP: No IARC: No OSHA: No

Emergency and First Aid Procedures: Call a physician immediately.

Ingestion: Give 1 - 2 cups of milk or water. Induce vomiting.

Inhalation: Remove to fresh air, give oxygen if breathing stopped.

Skin: Brush off, wash with soap and water.

Eye: Flush with warm water for 15 minutes.

Section VII - Precautions for Safe Handling and Use

Steps to be taken in case material is released or spilled:

Wear appropriate respiratory and protective equipment specified in section VIII - control measures.

Isolate spill area, provide ventilation and extinguish sources of ignition. 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. Use non-sparking tools.

Waste disposal method:

Dispose of in accordance with state, local, and federal regulations.

Hazard Label Information:

Store in cool, dry area. Store in tightly sealed container. Wash thoroughly after handling.

Section VIII - Control Measures

Protective Equipment Summary - Hazard Label Information:

NIOSH/MSHA approved respirator, Impervious gloves, Safety glasses, clothes to prevent skin contact.

Respiratory Protection (Specify Type) - NIOSH - approved dust respirator.

Ventilation:

Local Exhaust: To maintain concentration at low exposure levels.

Mechanical (General): Recommended.

Protective Gloves: Rubber gloves.

Eye Protection: Safety glasses.

Other Protective Clothing or Equipment: Protective gear suitable to prevent contamination.

Work/Hygienic/Maintenance 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.