
1. Product and Company Identification

Trade Name: Germanium telluride
Chemical Formula: GeTe
Recommended Use: Scientific research and development

Manufacturer/Supplier: Stanford Advanced Materials

Street: 23661 Birtcher Dr.
City: Lake Forest
State: California
Zip Code: 92630
Country: USA
Tel #: (949) 407-8904

2. Hazards Identification

Signal Word: Warning



Hazard Statements: H302: Harmful if swallowed

Precautionary Statements: P264: Wash thoroughly after handling
P270: Do not eat, drink or smoke when using this product
P405: Store locked up
P301+P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
P330: Rinse mouth
P501: Dispose of contents/container in accordance with local/regional/national/international regulations
None

HMIS Health Ratings (0-4):

Health: 1
Flammability: 0
Physical: 1

3. Composition

Chemical Family: Ceramic
Additional Names: Germanium(II) telluride, Germanium monotelluride, Tellanylidenegermanium, Telluroxogermanium

Germanium telluride (GeTe):

Percentage: 100 wt%
CAS #: 12025-39-7
EC #: 234-706-7

4. First Aid Procedures

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| General Treatment: | Seek medical attention if symptoms persist. |
| Special Treatment: | None |
| Important Symptoms: | None |
| Inhalation: | Remove victim to fresh air. Supply oxygen if breathing is difficult. |
| Ingestion: | Seek Medical Attention. |
| Skin: | Wash affected area with mild soap and water. Remove any contaminated clothing. |
| Eyes: | Flush eyes with water, blinking often for several minutes. Remove contact lenses if present and easy to do. Continue rinsing |

5. Firefighting Measures

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| Flammability: | Non-flammable |
| Extinguishing Media: | No special restrictions – use suitable extinguishing agent for surrounding material and type of fire. |
| Spec. Fire Fighting Procedure: | Use full-face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. See section 10 for decomposition products. |

6. Accidental Release Measures

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| If Material Is Released/Spilled: | Wear appropriate respiratory and protective equipment specified in special protection information. 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 disposal. Take care not to raise dust. |
| Environmental Precautions: | Isolate runoff to prevent environmental pollution. |

7. Handling and Storage

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| Handling Conditions: | Wash thoroughly after handling. |
| Storage Conditions: | Store in a cool dry place in a tightly sealed container. Store apart from materials and conditions listed in section 10. |
| Work/Hygienic Maintenance: | 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. |
| Ventilation: | Provide sufficient ventilation to maintain concentration at or below threshold limit. |

8. Exposure Controls and Personal Protection

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| Permissible Exposure Limits: | N/A |
| Threshold Limit Value: | 0.1 mg/m ³ as Te, long-term value |
| Special Equipment: | None |
| Respiratory Protection: | Use a respirator with type N95 (USA) or PE (EN 143) cartridges as a backup to engineering controls. Risk assessment should be performed to determine if purifying respirators are appropriate. Only use equipment tested and approved under appropriate government standards. |
| Protective Gloves: | Rubber gloves |
| Eye Protection: | Safety glasses or goggles |
| Body Protection: | Protective work clothing. Wear close-toed shoes and long sleeves/pants. |

9. Physical and Chemical Characteristics

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|---------------------------|--|
| Color | Black |
| Form: | Powder, Granules, Pellets, Sputtering target, Custom parts |
| Odor: | Odorless |
| Water Solubility: | Insoluble |
| Boiling Point: | N/A |
| Melting Point: | 725 °C |
| Flash Point: | N/A |
| Autoignition Temperature: | N/A |
| Density: | 6.14 g/cc |
| Molecular weight: | 200.20 g/mol |

10. Reactivity

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| Stability: | Stable under recommended storage conditions |
| Reacts With: | Acids, Oxidizing agents |
| Incompatible Conditions: | None |
| Hazardous Decomposition Products: | Tellurium dioxide, Germanium oxide |

11. Toxicological Information

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|---------------------------|----------------------|
| Potential Health Effects: | |
| Eyes: | May cause irritation |
| Skin: | May cause irritation |
| Ingestion: | Harmful |
| Inhalation: | May cause irritation |
| Chronic: | N/A |

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|------------------------------|-----|
| Signs & Symptoms: Aggravated | N/A |
| Medical Conditions: | N/A |

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| Median Lethal Dose: | N/A |
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| Carcinogen: | N/A |
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12. Ecological Information

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| Aquatic Toxicity: | Low |
| Persistent Bioaccumulation Toxicity: | No |
| Very Persistent, Very Bioaccumulative: | No |
| Notes: | N/A |

13. Disposal Considerations

Dispose of in accordance with local, state, national, and international regulations.

14. Transportation Data

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|-----------------------|-----------------------------------|
| Hazardous: | Not hazardous for transportation. |
| Hazard Class: Packing | N/A |
| Group: | N/A |
| UN Number: | N/A |
| Proper Shipping Name: | N/A |

15. Regulatory Information

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| Sec 302 Extremely Hazardous: | No |
| Sec 304 Reportable Quantities: | N/A |
| Sec 313 Toxic Chemicals: | No |

16. Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

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