



LTS Research Laboratories, Inc.
Safety Data Sheet
Samarium Tellurium Alloy

1. Product and Company Identification

Trade Name: Samarium Tellurium alloy
Chemical Formula: SmTe
Recommended Use: Scientific research and development

Manufacturer/Supplier: LTS Research Laboratories, Inc.
Street: 37 Ramland Road
City: Orangeburg
State: New York
Zip Code: 10962
Country: USA
Tel #: 855-587-2436 / 855-lts-chem

24-Hour Emergency Contact: 800-424-9300 (US & Canada)
+1-703-527-3887 (International)

2. Hazards Identification

Signal Word: Danger



Hazard Statements: H228 Flammable solid.
H261 In contact with water releases flammable gases.
H373 May cause damage to organs through prolonged or repeated exposure.
H301: Toxic if swallowed
H315: Causes skin irritation
H319: Causes serious eye irritation
H332: Harmful if inhaled
H335: May cause respiratory irritation

Precautionary Statements: P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P223 Keep away from any possible contact with water, because of violent reaction and possible flash fire.
P231 + P232 Handle under inert gas. Protect from moisture.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection
P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P312: Call a POISON CENTER or doctor/physician if you feel unwell
P335 + P334 Brush off loose particles from skin. Immerse in cool water/ wrap in wet bandages.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
P402 + P404 Store in a dry place. Store in a closed container.
P501 Dispose of contents/container to approved waste disposal plant

HMIS Health Ratings (0-4):	Powder	Bulk
Health:	2	1
Flammability:	3	1
Physical:	2	1

3. Composition

Chemical Family:	Alloy
Additional Names:	None
Samarium (Sm):	
Percentage:	0-100 wt%
CAS #:	7440-19-9
EC #:	231-128-7
Tellurium (Te):	
Percentage:	0-100 wt%
CAS #:	13494-80-9
EC #:	236-813-4

4. First Aid Procedures

General Treatment:	Seek medical attention if symptoms persist.
Special Treatment:	Immediately remove any clothing soiled by the product. In case of irregular breathing or respiratory arrest provide artificial respiration.
Important Symptoms:	None
Inhalation:	Remove victim to fresh air. Supply oxygen if breathing is difficult.
Ingestion:	Never induce vomiting or give anything by mouth to an unconscious person. Seek medical attention.
Skin:	Wash affected area with mild soap and water. Remove any contaminated clothing.
Eyes:	Flush eyes with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing

5. Firefighting Measures

Flammability:	Flammable as powder
Extinguishing Media:	Do not use water for metal fires – use dry extinguishing powder.
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

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

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

Permissible Exposure Limits:	0.1 mg/m ³ as Te, long-term value
Threshold Limit Value:	0.1 mg/m ³ as Te, long-term value
Special Equipment:	None
Respiratory Protection:	Dust Respirator
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

Color	Silver grey
Form:	Powder, Granules, Pellets, Sputtering target, Custom parts
Odor:	Odorless
Water Solubility:	Reacts
Boiling Point:	N/A
Melting Point:	N/A
Flash Point:	N/A
Autoignition Temperature:	N/A
Density:	N/A
Molecular weight:	N/A

10. Reactivity

Stability:	Stable under recommended storage conditions
Reacts With:	Oxidizing agents, water, acids, bases, air, halogens, acid chlorides, interhalogens
Incompatible Conditions:	Air, moisture, extreme temp, direct sunlight.
Hazardous Decomposition Products:	Metal oxide fume, Hydrogen telluride

11. Toxicological Information

Potential Health Effects:	
Eyes:	Causes serious eye damage
Skin:	Causes skin irritation
Ingestion:	May cause irritation
Inhalation:	May cause irritation
Chronic:	Rare earth compounds may cause delayed blood clotting leading to hemorrhages. Inhalation of rare earths may cause sensitivity to heat, itching, and increased awareness of odor and taste., Abdominal pain, Nausea, Vomiting, Salivation, fatigue, Dizziness, Confusion., Palpitation, Ataxia., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Signs & Symptoms:	N/A
Aggravated Medical Conditions:	N/A
Median Lethal Dose:	83 mg/kg for rat by mouth for Tellurium
Carcinogen:	N/A

12. Ecological Information

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

Hazardous:	Hazardous as powder only
Hazard Class:	4.1 Flammable solids
Secondary Hazard Class:	6.1 Toxic Substances
Packing Group:	PG II
UN Number:	UN3089, UN3284
Proper Shipping Name:	Metal powders, flammable, n.o.s. (Samarium Tellurium alloy)
Hazardous:	Hazardous for transportation



Hazard Class:	6.1 Toxic Substances
Packing Group:	III
UN Number:	UN3284
Proper Shipping Name:	Tellurium Compound, n.o.s. (Samarium Tellurium alloy)

15. Regulatory Information

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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