



LTS Research Laboratories, Inc.  
Safety Data Sheet  
Gallium Telluride

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1. Product and Company Identification

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Trade Name: Gallium Telluride  
Chemical Formula: Ga<sub>2</sub>Te<sub>3</sub>  
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)

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2. Hazards Identification

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Signal Word: Danger



Hazard Statements:

- H290: May be corrosive to metals.
- H301: Toxic if swallowed.
- H314: Causes severe skin burns and eye damage.
- H317: May cause an allergic skin reaction.
- H332: Harmful if inhaled.
- H335: May cause respiratory irritation.
- H360: May damage fertility or the unborn child.
- H412: Harmful to aquatic life with long lasting effects.

Precautionary Statements:

- P202: Do not handle until all safety precautions have been read and understood.
- P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
- P271: Use only outdoors or in a well-ventilated area.
- P272: Contaminated work clothing should not be allowed out of the workplace.
- P273: Avoid release to the environment.
- P280: Wear protective gloves/protective clothing/eye protection/face protection.
- P302+P352: IF ON SKIN: Wash with soap and water.
- P304+P340+P312: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
- P308+P313: IF exposed or concerned: Get medical advice/attention.
- P363: Wash contaminated clothing before reuse.
- P390: Absorb spillage to prevent material damage.
- P405: Store locked up.

P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

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

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### 3. Composition

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Chemical Family: Inorganic solid  
Additional Names: Gallium (III) Telluride, Gallium Sesquitelluride

Gallium Telluride ( $\text{Ga}_2\text{Te}_3$ ):  
Percentage: 100 wt%  
CAS #: 12024-27-0  
EC #: 234-694-3

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### 4. First Aid Procedures

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General Treatment: Seek medical attention if symptoms persist.  
Special Treatment: None  
Important Symptoms: May cause allergic skin reaction. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and the feet, dizziness, lightheadedness, chest pain, muscle pain or flushing. Causes burns by all exposure routes. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Ingestion cause severe swelling, severe damage to delicate tissue and danger of perforation.

Inhalation: Remove victim to fresh air. Supply oxygen if breathing is difficult. Seek medical attention.  
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. Seek medical attention.  
Eyes: Flush eyes with water, blinking often for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical attention.

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### 5. Firefighting Measures

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Flammability: Non-flammable, except as powder  
Extinguishing Media: Use water spray, alcohol resistant foam, dry chemical or carbon dioxide.  
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.

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## 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.

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## 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.

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## 8. Exposure Controls and Personal Protection

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Permissible Exposure Limits:	0.1 mg/m <sup>3</sup> as Te, long-term value
Threshold Limit Value:	0.1 mg/m <sup>3</sup> as Te, long-term value
Special Equipment:	None
Respiratory Protection:	Use a recommended dust respirator or mask. 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.

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## 9. Physical and Chemical Characteristics

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Color	Black
Form:	Powder, Granules, Pellets, Sputtering target, Custom parts
Odor:	Odorless
Water Solubility:	N/A
Boiling Point:	N/A
Melting Point:	788 °C to 792 °C
Flash Point:	N/A
Autoignition Temperature:	N/A
Density:	5.57 g/cc
Molecular weight:	522.25 g/mol

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## 10. Reactivity

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Stability:	Stable under recommended storage conditions.
Reacts With:	Oxidizing agents, strong acids, halogens.
Incompatible Conditions:	None
Hazardous Decomposition Products:	Metal oxide fume

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## 11. Toxicological Information

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### Potential Health Effects:

Eyes:	Causes severe eye damage
Skin:	May cause allergic skin reaction
Ingestion:	Causes severe swelling and damage
Inhalation:	Harmful if inhaled
Chronic:	N/A

Signs & Symptoms: May cause stomach irregularities, nausea, headache, vomiting, central nervous system depression.

Aggravated Medical Conditions: N/A

Median Lethal Dose: 50 mg/kg for rat by mouth as Ga

Carcinogen: N/A

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## 12. Ecological Information

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Aquatic Toxicity: N/A

Persistent Bioaccumulation Toxicity: No

Very Persistent, Very Bioaccumulative: No

Notes: N/A

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## 13. Disposal Considerations

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

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## 14. Transportation Data

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Hazardous: Hazardous for transportation



Hazard Class: 8. Corrosives  
Packing Group: III  
UN Number: UN 1759  
Proper Shipping Name: Corrosive solids, N.O.S (Gallium Telluride)

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## 15. Regulatory Information

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Sec 302 Extremely Hazardous: No

Sec 304 Reportable Quantities: N/A

Sec 313 Toxic Chemicals: No

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## 16. Other Information

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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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