

# MATERIAL SAFETY DATA SHEET

## I PRODUCT IDENTIFICATION

**Trade Name:** Gallium Telluride GaTe, pieces  
**Synonyms:** Gallium telluride, gallium monotelluride  
**CAS #:** 12024-14-5

**Chemical Family:** Metal telluride  
**Formula:** GaTe  
**Molecular Weight:** 197.32

## II HAZARDOUS INGREDIENTS

Hazardous Components:	OSHA PEL:	ACGIH TLV:	Other limits:	Percentage:
Gallium telluride	.1 mg Te/m <sup>3</sup>	.1 mg Te/m <sup>3</sup>	N/E	0.0-100.0

SEC. 302 (EHS): No    SEC. 304 RQ: No    SEC. 313: No

**HMIS Ratings (0-4):** Health: 4    Flammability: 0    Reactivity: 0  
**HMIS Protective Equipment:** Goggles, gloves, apron, and respirator

## III PHYSICAL DATA

<b>Boiling Point:</b>	N/E or N/A	<b>Melting Point:</b>	822.0-826.0 °C
<b>Physical State:</b>	Solid	<b>Evaporation Rate:</b>	N/A
<b>Specific Gravity (H<sub>2</sub>O=1):</b>	5.44 gm/cc at 25.0 °C	<b>Vapor Density (Air=1):</b>	N/A
<b>Vapor Pressure (mm Hg):</b>	N/A	<b>Solubility in Water:</b>	N/E
<b>Appearance and Odor:</b>	Black pieces, no odor.	<b>% Volatile:</b>	N/E or N/A

## IV FIRE AND EXPLOSION HAZARDS DATA

**Flash Point:** N/E or N/A    **Method Used:** Non-flammable  
**Flammable Limits:** LEL: N/A    UEL: N/A

**Extinguishing Media:** USE: Not applicable. Use suitable extinguishing media for surrounding materials an type of fire.  
**Special Fire Fighting Procedures:** Firefighters must wear full face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. Fumes from fire are hazardous. Isolate runoff to prevent environmental pollution.

**Unusual Fire & Explosion Hazards:** When heated to decomposition, gallium telluride emits toxic fumes of tellurium.

## V HEALTH HAZARD INFORMATION

**Routes of Entry:** Inhalation, Skin, Eyes, Ingestion

**Health Hazards (Acute and Chronic):**

To the best of our knowledge the chemical, physical and toxicological properties of gallium telluride have not been thoroughly investigated and recorded.

Elemental tellurium has relatively low toxicity. It is converted in the body to dimethyl telluride which imparts a garlic-like odor to breath and sweat. Heavy exposures may, in addition, result in headache, drowsiness, metallic taste, loss of appetite, nausea, tremors, convulsion, and respiratory arrest (Sax, Dangerous Properties of Industrial Materials, eighth edition).