



LTS Research Laboratories, Inc.
Safety Data Sheet
Thallium Metal

1. Product and Company Identification

Trade Name: Thallium
Chemical Formula: Tl
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: H300 Fatal if swallowed
H330 Fatal if inhaled
H312 Harmful in contact with skin

Precautionary Statements: P260 Do not breathe dust/fume/vapor
P284 Wear respiratory protection
P320 Specific treatment is urgent
P304+P340 If inhaled: Remove victim to fresh air and keep at rest in a comfortable position
P405 Store locked up

HMIS Health Ratings (0-4):

Health: 3
Flammability: 0
Physical: 1

3. Composition

Chemical Family: Metal
Additional Names: None

Thallium (Tl):
Percentage: 100 wt%
CAS #: 7440-28-0
EC #: 231-138-1

4. First Aid Procedures

General Treatment:	Seek medical attention if exposed.
Special Treatment:	N/A
Important Symptoms:	N/A
Inhalation:	Remove victim to fresh air. Supply oxygen if breathing is difficult.
Ingestion:	Do not induce vomiting. Call for medical help.
Skin:	Wash affected area thoroughly with 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

Flammability:	Non-flammable, except as powder
Extinguishing Media:	Do not use water for metal fires – use CO ₂ , sand, 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. Handle with care.
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 Tl, long-term value, skin
Threshold Limit Value:	0.02 mg/m ³ as Tl, long-term value, inhalable fraction, skin
Special Equipment:	None
Respiratory Protection:	Use a respirator with type P100 (USA) or P3 (EN 143) cartridges as a backup to engineering controls
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	Metallic grey
Form:	Powder, Granules, Pellets, Sputtering target, Custom parts
Odor:	Odorless
Water Solubility:	Insoluble
Boiling Point:	1457 °C
Melting Point:	303.5 °C
Flash Point:	N/A
Autoignition Temperature:	N/A
Density:	11.85 g/cc
Molecular weight:	204.38 g/mol

10. Reactivity

Stability:	Stable under recommended storage conditions
Reacts With:	Oxidizing agents
Incompatible Conditions:	None
Hazardous Decomposition Products:	Thallium oxide

11. Toxicological Information

Potential Health Effects:

Eyes:	Harmful
Skin:	Harmful
Ingestion:	Fatal
Inhalation:	Fatal
Chronic:	May cause damage to blood

Signs & Symptoms:

Aggravated Medical Conditions:

N/A
N/A

Median Lethal Dose:

20-200 mg/kg for rat by mouth

Carcinogen:

N/A

12. Ecological Information

Aquatic Toxicity:	High
Persistent Bioaccumulation Toxicity:	No
Very Persistent, Very Bioaccumulative:	No
Notes:	Do not allow to reach drinking water, even in very small quantities

13. Disposal Considerations

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

14. Transportation Data

Hazardous:

Hazardous for transportation



Hazard Class:

6.1 Toxic substances

Packing Group:

II

UN Number:

UN1707

Proper Shipping Name:

Thallium compounds, n.o.s. (Thallium metal)

15. Regulatory Information

Sec 302 Extremely Hazardous:

No

Sec 304 Reportable Quantities:

N/A

Sec 313 Toxic Chemicals:

Yes

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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