



LTS Research Laboratories, Inc.  
Safety Data Sheet  
Titanium Iodide

---

1. Product and Company Identification

---

Trade Name: Titanium Iodide  
Chemical Formula:  $TiI_4$   
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: H303: May be harmful if swallowed  
H314: Causes severe skin burns and eye damage

Precautionary Statements: P260: Do not breathe dust/fume/gas/mist/vapours/spray  
P264; Wash face, hands and any exposed skin thoroughly after handling  
P280: Wear protective gloves/protective clothing/eye protection/face protection  
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting  
P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing  
P310: Immediately call a POISON CENTER or doctor/physician  
P363: Wash contaminated clothing before reuse  
P405: Store locked up  
P501: Dispose of contents/container in accordance with local/national/international regulations

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

---

### 3. Composition

---

Chemical Family:	Metal halide
Additional Names:	Titanium (IV) iodide, titanium tetraiodide
Titanium Iodide (TiI <sub>4</sub> ):	
Percentage:	100 wt%
CAS #:	7720-83-4
EC #:	231-754-0

---

### 4. First Aid Procedures

---

General Treatment:	Seek immediate medical attention. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
Special Treatment:	N/A
Important Symptoms:	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 causes severe swelling, severe damage to the delicate tissue and danger of perforation.
Inhalation:	Seek immediate medical attention Remove victim to fresh air. Supply oxygen if breathing is difficult.
Ingestion:	Seek immediate medical attention. Do not induce vomiting.
Skin:	Seek immediate medical attention. Wash affected area with soap and plenty of water. Remove contaminated clothing and shoes immediately.
Eyes:	Seek immediate medical attention. Flush eyes with water, blinking often for several minutes. Remove contact lenses if present and easy to do. Continue rinsing eyes during transport to hospital.

---

### 5. Firefighting Measures

---

Flammability:	Non-flammable
Extinguishing Media:	Alcohol-resistant foam, carbon dioxide (CO <sub>2</sub> ), dry chemical, dry sand
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. Do not let this chemical enter drains.
Environmental Precautions:	Isolate runoff to prevent environmental pollution.

---

## 7. Handling and Storage

---

Handling Conditions:	Wash thoroughly after handling. Wear personal protective equipment. Avoid inhalation and ingestion. Avoid dust formation. Do not let it get in eyes, on skin or on clothing. Do not ingest. Do not breathe dust. Ensure adequate ventilation where dust is formed.
Storage Conditions:	Store in a cool dry and well-ventilated place in a tightly sealed container. Keep under nitrogen. Store away from direct sunlight and corrosives. Air, moisture and light sensitive.
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 enough ventilation to maintain concentration at or below threshold limit.

---

## 8. Exposure Controls and Personal Protection

---

Permissible Exposure Limits:	N/A
Threshold Limit Value:	N/A
Special Equipment:	None
Respiratory Protection:	Dust Respirator
Protective Gloves:	Nitrile 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	Dark brown, red or black
Form:	Powder, Granules, Pellets, Sputtering target, Custom parts
Odor:	Pungent
Water Solubility:	N/A
Boiling Point Range:	377 °C at 760 mmHg
Melting Point Range:	150 °C
Flash Point:	> 110 °C
Autoignition Temperature:	N/A
Density:	4.37 g/cm <sup>3</sup>
Molecular weight:	555.48 g/mol

---

## 10. Reactivity

---

Stability:	Stable under recommended storage conditions
Reacts With:	Oxidizing agents
Incompatible Conditions:	Moisture, light, air
Hazardous Decomposition Products:	Metal oxide fume, titanium oxides

---

## 11. Toxicological Information

---

### Potential Health Effects:

Eyes:	Causes severe eye damage
Skin:	Causes severe skin burns
Ingestion:	May be harmful if swallowed
Inhalation:	May cause irritation
Chronic:	N/A

Signs & Symptoms: Cough, shortness of breath, headache, nausea, vomiting. Possible perforation of stomach or esophagus should be investigated.

Aggravated Medical Conditions: N/A

Median Lethal Dose: N/A

Carcinogen: IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.  
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.  
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

---

## 12. Ecological Information

---

Aquatic Toxicity:	N/A
Persistent Bioaccumulation Toxicity:	Soluble in water. Persistence is unlikely based on information available.
Very Persistent, Very Bio accumulative:	N/A
Notes:	Do not empty into drains.

---

## 13. Disposal Considerations

---

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

---

## 14. Transportation Data

---

Hazardous: Hazardous for Transportation



Hazard Class:	8 Corrosive solid
Packing Group:	I
UN Number:	UN3260
Proper Shipping Name:	Corrosive solid, acidic, inorganic, n.o.s. (Titanium Iodide)

---

## 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.

Document Last Revised:

09/13/2019

