LTS Research Laboratories, Inc.
Safety Data Sheet
Titanium Sulfide

1. Product and Company Identification

Trade Name:	Titanium sulfide
Chemical Formula:	TiS_2
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: Warning

Hazard Statements:
H261: In contact with water releases flammable gas
H315 Causes skin irritation
H319 Causes serious eye irritation
H335: May cause respiratory irritation

Precautionary Statements:
P231+P232: Handle under inert gas. Protect from moisture
P261 Avoid breathing dust/fume/vapor
P280: Wear protective gloves/protective clothing/eye protection/face protection
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
P405: Store locked up
P501: Dispose of contents/container in accordance with local/regional/national/international regulations

HMIS Health Ratings (0-4):

Health:	2
Flammability:	2
Physical:	2

3. Composition

Chemical Family:	Ceramic
Additional Names:	Titanium(IV) sulfide, Titanium sulphide, Titanium disulfide, Titanium disulphide
Titanium sulfide (TiS_2):	
Percentage:	100 wt.%
CAS #:	12039-13-3
EC #:	234-883-0

4. First Aid Procedures

General Treatment:	Seek medical attention if symptoms persist.
Special Treatment:	None
Important Symptoms:	None
Inhalation:	Remove victim to fresh air. Supply oxygen if breathing is difficult.
Ingestion:	Seek medical attention.
Skin:	Wash affected area with mild 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:	Flammable
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.
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:	N/A
Threshold Limit Value:	N/A
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	Green
Form:	Powder, Granules
Odor:	Like rotten eggs
Water Solubility:	Reacts
Boiling Point:	N/A
Melting Point:	N/A
Flash Point:	N/A
Autoignition Temperature:	N/A
Density:	3.2 g/cc
Molecular weight:	112.00 g/mol

10. Reactivity

Stability:	Stable under recommended storage conditions
Reacts with:	Acids
Incompatible Conditions/Materials:	Oxidizing agents, Acids
Hazardous Decomposition Products:	Hydrogen sulfide

11. Toxicological Information

Potential Health Effects:

Eyes:	Causes serious eye damage
Skin:	Causes irritation
Ingestion:	May cause irritation
Inhalation:	May cause irritation
Chronic:	Titanium compounds are considered physiologically inert. There are no reported cases in the literature where titanium as such has caused human intoxication

Signs & Symptoms:	N/A
Aggravated Medical Conditions:	N/A
Median Lethal Dose:	N/A
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 for transportation.

Hazard Class:	4.2 Spontaneously combustible materials
Packing Group:	III
UN Number:	UN3174
Proper Shipping Name:	Titanium disulphide

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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