

## LTS Research Laboratories, Inc. Safety Data Sheet Tin Sulfide

	1. Product and Company Identification
Trade Name:	Tin sulfide
Chemical Formula:	$SnS_2$
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:	H315 Causes skin irritation
	H319 Causes serious eye irritation H335 May cause respiratory irritation
Precautionary Statements:	H319 Causes serious eye irritation H335 May cause respiratory irritation P261 Avoid breathing dust/fume/vapor
Precautionary Statements: HMIS Health Ratings (0-4):	H319 Causes serious eye irritation H335 May cause respiratory irritation P261 Avoid breathing dust/fume/vapor
Precautionary Statements: HMIS Health Ratings (0-4): Health:	H319 Causes serious eye irritation H335 May cause respiratory irritation P261 Avoid breathing dust/fume/vapor P305+P351 If in eyes: Rinse cautiously with water for several minutes.
Precautionary Statements: HMIS Health Ratings (0-4):	H319 Causes serious eye irritation H335 May cause respiratory irritation P261 Avoid breathing dust/fume/vapor P305+P351 If in eyes: Rinse cautiously with water for several minutes
Precautionary Statements: HMIS Health Ratings (0-4): Health: Flammability:	H319 Causes serious eye irritation H335 May cause respiratory irritation P261 Avoid breathing dust/fume/vapor P305+P351 If in eyes: Rinse cautiously with water for several minutes.
Precautionary Statements: HMIS Health Ratings (0-4): Health: Flammability: Physical: 	H319 Causes serious eye irritation H335 May cause respiratory irritation P261 Avoid breathing dust/fume/vapor P305+P351 If in eyes: Rinse cautiously with water for several minutes. 1 0 1 3. Composition Ceramic
Precautionary Statements: HMIS Health Ratings (0-4): Health: Flammability: Physical:	H319 Causes serious eye irritation H335 May cause respiratory irritation P261 Avoid breathing dust/fume/vapor P305+P351 If in eyes: Rinse cautiously with water for several minutes 1 0 1 3. Composition
Precautionary Statements: HMIS Health Ratings (0-4): Health: Flammability: Physical: Chemical Family: Additional Names: Tin sulfide (SnS <sub>2</sub> ):	H319 Causes serious eye irritation H335 May cause respiratory irritation P261 Avoid breathing dust/fume/vapor P305+P351 If in eyes: Rinse cautiously with water for several minutes 1 0 1 3. Composition Ceramic Stannic sulfide, Tin(IV) sulfide, Tin diosulfide, Mosaic gold
Precautionary Statements: HMIS Health Ratings (0-4): Health: Flammability: Physical: Chemical Family: Additional Names: Tin sulfide (SnS <sub>2</sub> ): Percentage:	H319 Causes serious eye irritation H335 May cause respiratory irritation P261 Avoid breathing dust/fume/vapor P305+P351 If in eyes: Rinse cautiously with water for several minutes 1 0 1 3. Composition Ceramic Stannic sulfide, Tin(IV) sulfide, Tin diosulfide, Mosaic gold 100 wt%
Precautionary Statements: HMIS Health Ratings (0-4): Health: Flammability: Physical: Chemical Family: Additional Names: Tin sulfide (SnS <sub>2</sub> ):	H319 Causes serious eye irritation H335 May cause respiratory irritation P261 Avoid breathing dust/fume/vapor P305+P351 If in eyes: Rinse cautiously with water for several minutes 1 0 1 3. Composition Ceramic Stannic sulfide, Tin(IV) sulfide, Tin diosulfide, Mosaic gold

	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:	Give one to two glasses of water and induce vomiting. Never induce
Skin:	vomiting or give anything by mouth to an unconscious person. 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
	Non-flammable
Extinguishing Media:	No special restrictions – use suitable extinguishing agent for
Spec. Fire Fighting Procedure:	surrounding material and type of fire.
	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.
	isolate ranon to protent environmental portation.
	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
XX7. 1 //X	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
ventration.	threshold limit.
	Exposure Controls and Personal Protection
Permissible Exposure Limits:	None
Threshold Limit Value:	None
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.

Color	Bronze
Form:	Powder, Granules, Pellets, Sputtering target, Custom parts
Odor:	Odorless
Water Solubility:	Insoluble
Boiling Point:	N/A
Melting Point:	600 °C
Flash Point:	N/A
	N/A N/A
Autoignition Temperature:	
Density:	4.5 g/cc
Molecular weight:	182.84 g/mol
	10. Reactivity
Stability:	Stable under recommended storage conditions
Reacts With:	Oxidizing agents
incompatible Conditions:	None
Hazardous Decomposition Products:	Metal oxide fume, Sulfur oxides
	11. Toxicological Information
Potential Health Effects:	
Eyes:	May cause serious irritation
Skin:	May cause irritation
Ingestion:	May cause irritation
Inhalation:	May cause irritation
Chronic:	N/A
Chronic.	IN/A
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Signs & Symptoms:	IN/A horatorias loc.
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

14. Transportation Data		
Hazardous:	Not hazardous for transportation.	
Hazard Class:	N/A	
Packing Group:	N/A	
UN Number:	N/A	
Proper Shipping Name:	N/A	

	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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