



LTS Research Laboratories, Inc.
Safety Data Sheet
Selenium Sulfide

1. Product and Company Identification

Trade Name: Selenium Sulfide
Chemical Formula: SeS₂
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: H301+H331: Toxic if swallowed or if inhaled
H373: May cause damage to organs through prolonged or repeated exposure
H410: Very toxic to aquatic life with long lasting effects

Precautionary Statements: P260: Do not breathe dust/fume/gas/mist/vapours/spray
P264: Wash skin thoroughly after handling
P270: Do not eat, drink or smoke when using this product
P271: Use only outdoors or in a well-ventilated area
P273: Avoid release to the environment
P301+P310+ P330: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth
P304+P340+P311: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician
P314: Get Medical advice/attention if you feel unwell
P391: Collect spillage
P403+P233: Store in a well-ventilated place. Keep container tightly closed
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: 1
Physical: 1

3. Composition

Chemical Family:	Ceramic
Additional Names:	Selenium disulfide, Selenium disulphide, Selenium sulphide
Selenium Sulfide (SeS ₂):	
Percentage:	0-100 wt%
CAS #:	7488-56-4
EC #:	231-303-8

4. First Aid Procedures

General Treatment:	Immediately remove any soiled clothing. Remove breathing apparatus only after removing the contaminated clothing. In case of irregular breathing or respiratory arrest provide artificial breathing. Seek medical attention.
Special Treatment:	None
Important Symptoms:	None
Inhalation:	Remove victim to fresh air. Supply oxygen if breathing is difficult. Keep victim warm. Seek medical attention.
Ingestion:	Do not induce vomiting. Immediately seek medical attention.
Skin:	Wash affected area with mild soap and water. Remove any contaminated clothing. Seek medical attention.
Eyes:	Flush eyes with water, blinking often for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical attention.

5. Firefighting Measures

Flammability:	Non-flammable
Extinguishing Media:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
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. Discharge into the environment should be avoided.

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:	0.2 mg/m ³ as Se, long-term value
Threshold Limit Value:	0.2 mg/m ³ as Se, long-term value
Special Equipment:	Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.
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	Red-brown
Form:	Powder, Granules, Pellets, Sputtering target, Custom parts
Odor:	Odorless
Water Solubility:	Insoluble
Boiling Point:	N/A
Melting Point:	<100°C
Flash Point:	N/A
Autoignition Temperature:	N/A
Density:	3.05 g/cc
Molecular weight:	111.89 g/mol

10. Reactivity

Stability:	Stable under recommended storage conditions
Reacts With:	Oxidizing agents
Incompatible Conditions:	Organic materials, strong acids and Ammonia
Hazardous Decomposition Products:	Toxic metal oxide fume, Sulphur oxides, selenium oxides, hydrogen selenide, hydrogen sulfide

11. Toxicological Information

Potential Health Effects:	
Eyes:	Causes irritation
Skin:	Causes irritation
Ingestion:	Toxic if ingested
Inhalation:	Toxic if inhaled
Chronic:	N/A
Signs & Symptoms:	Cough, Shortness of breath, Headache, Nausea, Vomiting
Aggravated Medical Conditions:	N/A
Median Lethal Dose:	138 mg/kg for rat by mouth
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. EPA-D: Not classifiable as to human carcinogenicity: Inadequate human and animal evidence of carcinogenicity or no data are available.

12. Ecological Information

Aquatic Toxicity: N/A
Persistent Bioaccumulation Toxicity: No
Very Persistent, Very Bioaccumulative: No
Notes: Do not allow material to be released into the environment without proper governmental permits.
Do not allow product to reach ground water, water course, or sewage system, even in small quantities.
Danger to drinking water if even extremely small quantities leak into the ground.
Also poisonous for fish and plankton in water bodies.
May cause long lasting harmful effects to aquatic life.
Avoid transfer into the environment.
Very toxic for aquatic organisms.

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 substance
Packing Group: II
UN Number: 2657
Proper Shipping Name: Selenium Disulfide

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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