



LTS Research Laboratories, Inc.  
Safety Data Sheet  
Sodium Sulfide

---

1. Product and Company Identification

---

Trade Name: Sodium sulfide  
Chemical Formula: Na<sub>2</sub>S  
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: H251 Self-heating: may catch fire.  
H290 May be corrosive to metals.  
H301 + H311 Toxic if swallowed or in contact with skin.  
H302: Harmful if swallowed  
H314: Causes severe skin burns and eye damage  
H400 Very toxic to aquatic life.

Precautionary Statements: P234 Keep only in original container.  
P235 + P410 Keep cool. Protect from sunlight.  
P260 Do not breathe dust or mist.  
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.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
P284: Wear respiratory protection  
P301 + P310 + P330 IF SWALLOWED: Immediately call a POISON CENTER/doctor. Rinse mouth.  
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all Contaminated clothing. Rinse skin with water/shower.  
P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.  
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.  
P362 Take off contaminated clothing and wash before reuse.

P390 Absorb spillage to prevent material damage.  
P391 Collect spillage.  
P402: Store in a dry place  
P403 + P235 Store in a well-ventilated place. Keep cool.  
P405 Store locked up.  
P406 Store in corrosive resistant container with a resistant inner liner.  
P407 Maintain air gap between stacks/ pallets.  
P420 Store away from other materials.  
P501 Dispose of contents/ container to an approved waste disposal

plant. HMIS Health Ratings (0-4):

Health:	3
Flammability:	3
Physical:	2

---

### 3. Composition

---

Chemical Family:	Salt
Additional Names:	N/A

Sodium sulfide (Na <sub>2</sub> S):	
Percentage:	100 wt%
CAS #:	1313-82-2
EC #:	215-211-5

---

### 4. First Aid Procedures

---

General Treatment:	Seek medical attention if symptoms persist. Immediately remove any clothing soiled by the product. In case of irregular breathing or respiratory arrest provide artificial respiration
Special Treatment:	None
Important Symptoms:	Causes severe skin burns Causes serious eye damage
Inhalation:	Remove victim to fresh air. Supply oxygen if breathing is difficult. Seek medical treatment.
Ingestion:	Give one to two glasses of water and induce vomiting. Never induce vomiting or give anything by mouth to an unconscious person. Seek medical treatment.
Skin:	Wash affected area with mild soap and water. Remove any contaminated clothing. Seek medical treatment.
Eyes:	Flush eyes with water, blinking often for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical treatment.

---

### 5. Firefighting Measures

---

Flammability:	Flammable
Extinguishing Media:	Do not use water– use CO <sub>2</sub> , 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:	Handle under dry protective gas. Keep container tightly sealed/ Store in a cool, dry place in tightly closed containers. Ensure good ventilation at the workplace. Wash thoroughly after handling.
Storage Conditions:	Store in the dark. Store away from water/moisture. Do not store with acids. Store away from oxidizing agents. Store away from metals. 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: Threshold Limit Value:	N/A N/A
Special Equipment: Respiratory Protection:	None Use a respirator with type P100 (USA) or P3 (EN143) cartridges as a backup to engineering controls. Risk assessment should be performed to determine if air-purifying respirators are appropriate. Only use equipment tested and approved under appropriate government standards.
Protective Gloves: Penetration time of glove material: Eye Protection:	Nitrile rubber, NBR 0.11mm thick. 480 minutes Tightly sealed goggles
Body Protection:	Full face protection Protective work clothing. Wear close-toed shoes and long sleeves/pants.

---

## 9. Physical and Chemical Characteristics

---

Color	Pale yellow
Form:	Powder, Granules, Pellets, Sputtering target, Custom parts
Odor:	Like rotten eggs
Water Solubility:	Reactive
Boiling Point:	N/A
Melting Point:	950 °C
Flash Point:	N/A
Autoignition Temperature:	N/A
Density:	1.856 g/cc
Molecular weight:	78.04 g/mol

---

## 10. Reactivity

---

Stability:	Stable under recommended storage conditions
Reacts With:	Oxidizing agents, water, acids
Incompatible Conditions:	Moisture/air, Oxidizing Agents, Metals, Acids, Light
Hazardous Decomposition Products:	Sulfur oxides (SO <sub>x</sub> ), Sodium oxide, Hydrogen sulfide, Metal oxide fume

---

## 11. Toxicological Information

---

Potential Health Effects:	
Eyes:	Causes serious eye damage
Skin:	Toxic in contact with skin Danger through skin absorption
Ingestion:	Harmful if swallowed
Inhalation:	May cause irritation
Chronic:	N/A
Signs & Symptoms:	N/A
Aggravated Medical Conditions:	N/A
Median Lethal Dose:	208 mg/kg for rat by mouth
Carcinogen:	N/A

---

## 12. Ecological Information

---

Aquatic Toxicity:	N/A
Persistent Bioaccumulation Toxicity:	N/A
Very Persistent, Very Bioaccumulative:	N/A
Notes:	Do not allow material to be released to the environment without proper governmental permits. Do not allow undiluted product or large quantities to reach ground water, water course or sewage system. Avoid transfer into the environment. Do not allow product to reach any water sources. Danger to drinking water if even extremely small quantities leak into the ground. Also poisonous for fish and plankton in water bodies. 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: 4.2 Substances liable to spontaneous combustion  
Packing Group: II  
UN Number: UN1385  
Proper Shipping Name: Sodium sulphide, anhydrous

---

#### 15. Regulatory Information

---

Sec 302 Extremely Hazardous: N/A  
Sec 304 Reportable Quantities: N/A  
Sec 313 Toxic Chemicals: N/A

---

#### 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: 11/25/2020