

## SAFETY DATA SHEET

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifiers

Product name            Sodium Bisulfide  
CAS number            16721-80-5  
Synonyms               Sodium hydrogen sulfide; sodium hydrosulfide

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses                    Laboratory chemicals.

#### 1.3 Details of the supplier of the safety data sheet

Company                            Lab Alley, LLC  
    12501 Pauls Valley Road  
    Austin, Texas 78737  
    U.S.A.  
  
Telephone                         512-668-9918  
Fax                                    512-886-4008

#### 1.4 Emergency telephone

**Emergency Phone #**            US & Canada: 1-800-535-5053            INFOTRAC  
    International 1-352-323-3500            INFOTRAC

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Self-heating Substances and Mixtures	Category 1
Corrosive to Metals	Category 1
Acute Oral Toxicity	Category 3
Skin Corrosion/Irritation	Category 1B
Serious Eye Damage/Eye Irritation	Category 1

## 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word

Danger

Hazard statements

Self-heating; may catch fire.  
May be corrosive to metals.  
Toxic if swallowed.  
Causes severe skin burns and eye damage.

Precautionary statements

Prevention: Wash face, hands, and any exposed skin thoroughly after handling. Do not eat, drink, or smoke when using this product. Do not breathe dust/fume/gas/mist/vapors/spray. Wear protective gloves/protective clothing/eye protection/face protection. Use only outdoors or in a well-ventilated area. Keep cool. Protect from sunlight. Keep only in original container. Wear respiratory protection.

Response: Immediately call a POISON CENTER or doctor/physician.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

IF ON SKIN (or hair): Take off all contaminated clothing immediately. Rinse skin with water/shower. Wash contaminated clothing before re-use.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contacts, if present and easy to do. Continue rinsing.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

Spills: Absorb spillage to prevent material damage.

Storage: Store locked up. Store in a well-ventilated place. Keep container tightly closed. Maintain air gap between stacks/pallets. Store away from other materials. Store in corrosive resistant polypropylene container with a resistant inliner. Store in a dry place.

Disposal: Dispose of contents/container to an approved waste disposal plant.

## 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Very toxic to aquatic life.

Corrosive to respiratory tract.

## SECTION 3: Composition/information on ingredients

### 3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Sodium hydrosulfide	Sodium bisulfide; sodium hydrogen sulfide	16721-80-5	<100%

## SECTION 4: First aid measures

### 4.1 Description of first-aid measures

#### General advice

<b>If inhaled</b>	Remove to fresh air. If not breathing, give artificial respiration. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required.
<b>In case of skin contact</b>	Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.
<b>In case of eye contact</b>	In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
<b>If swallowed</b>	Do NOT induce vomiting. Call a physician or poison control center immediately.

### 4.2 Most important symptoms and effects, both acute and delayed

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.

### 4.3 Indication of any immediate medical attention and special treatment needed

Show this safety data sheet to the doctor in attendance; immediate medical attention is required. Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

<b>Suitable extinguishing media</b>	Dry sand, Carbon dioxide (CO <sub>2</sub> ), powder, dry chemical, alcohol-resistant foam.
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**Unsuitable extinguishing media** Do not use water or foam.

**5.2 Specific hazards arising from the substance or mixture**

The product causes burns of eyes, skin and mucous membranes. Do not allow run-off from fire-fighting to enter drains or water courses.

**5.3 Special protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

**5.4 Further information**

**Flash Point** No information available.

**Autoignition Temperature** No information available.

**Explosion limits**

**Upper** No information available.

**Lower** No information available.

**Sensitivity to Mechanical Impact** No information available.

**Sensitivity to Static Discharge** No information available.

**NFPA**

Health	Flammability	Instability	Physical hazards
3	3	1	N/A

**SECTION 6: Accidental release measures**

**6.1 Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment as required. Evacuate personnel to safe areas. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid dust formation.

**6.2 Environmental precautions**

Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

**6.3 Methods and materials for containment and cleaning up**

Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

**6.4 Reference to other sections**

See Section 2 for full list of hazard and precaution statements.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

#### Precautions on safe handling

Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Use only under a chemical fume hood. Do not ingest. If swallowed, seek immediate medical assistance. Do not breathe (dust, vapor, mist, gas). Avoid dust formation.

#### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

### 7.2 Conditions for safe storage, including any incompatibilities

#### Storage conditions

Corrosives area. Store under an inert atmosphere. Protect from moisture. Keep containers tightly closed in a dry, cool, and well-ventilated place. Keep away from incompatible materials.

#### Incompatibilities

Strong bases.

## SECTION 8: Exposure controls/personal protection

### 8.1 Occupational exposure limits

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

### 8.2 Exposure controls

#### Appropriate engineering controls

Ensure that eyewash stations and safety showers are close to the workstation location.

#### Personal protective equipment

##### Eye/face protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

##### Skin protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

##### Body Protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

### Respiratory protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Recommended Filter type: Particulates filter conforming to EN 143.

### Control of environmental exposure

No information available.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical State	Solid crystalline
Appearance	Off-white
Odor	Rotten-egg like
Odor Threshold	No information available
pH	No information available
Melting Point/Range	350°C / 662°F
Boiling Point/Range	No information available
Evaporation Rate	Not applicable
Flammability (solid)	No information available
Flammability or explosive limit	No data available
Upper	
Lower	
Vapor Pressure	No information available
Vapor Density	Not applicable
Density	No information available
Solubility	No information available
Partition coefficient; n-octanol/water	No data available
Autoignition Temp	No information available
Decomposition Temp	No information available
Viscosity	Not applicable
Molecular Formula	NaHS
Molecular Weight	56.06 g/mol
VOC Content(%)	No information available
Oxidizing properties	No information available

### 9.2 Other safety information

No information available.

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Known reactive hazard.

## 10.2 Chemical stability

Moisture sensitive, hygroscopic.

## 10.3 Possibility of hazardous reactions

None under normal processing.

## 10.4 Conditions to avoid

Exposure to moist air or water.

## 10.5 Incompatible materials

Strong bases.

## 10.6 Hazardous decomposition products

None under normal use conditions.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Product Information, Component Information

##### Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium hydrosulfide	96 mg/kg (Rat)	-	1500 mg/m <sup>3</sup> (Rat) 14 min

##### Skin corrosion/irritation

No information available.

##### Serious eye damage/eye irritation

No information available.

##### Respiratory or skin sensitization

No information available.

##### Germ cell mutagenicity

No information available.

##### Carcinogenicity

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
Sodium hydrosulfide	16721-80-5	Not listed	Not listed	Not listed	Not listed	Not listed

##### Specific target organ toxicity - single exposure

None known.

##### Specific target organ toxicity - repeated exposure

None known.

**Reproductive toxicity**

No information available.

**Chronic effects**

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.

**11.2 Additional Information**

The toxicological properties have not been fully investigated.

**SECTION 12: Ecological information**

**12.1 Toxicity**

Very toxic to aquatic organisms.

**12.2 Persistence and degradability**

Persistence is unlikely.

**12.3 Bio accumulative potential**

No information available.

**12.4 Mobility in soil**

Likely mobile in the environment due to its water solubility (log Pow = -3.5).

**12.5 Results of PBT and vPvB assessment**

No information available.

**12.6 Endocrine disrupting properties**

No information available.

**12.7 Other adverse effects**

No information available.

**SECTION 13: Disposal considerations**

**13.1 Waste Disposal Methods**

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

**SECTION 14: Transport information**



**DOT (US)**

UN-no	UN2318
Proper Shipping Name	SODIUM HYDROSULFIDE
Hazard Class	4.2
Packing Group	II

**IMDG**

UN-no	UN2318
Proper Shipping Name	SODIUM HYDROSULFIDE
Hazard Class	4.2
Packing Group	II

**IATA**

UN-no	UN2318
Proper Shipping Name	SODIUM HYDROSULFIDE
Hazard Class	4.2
Packing Group	II

**SECTION 15: Regulatory information**

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not applicable.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Listed, Sodium hydrosulfide (CAS # 16721-80-5), RQ: 5000 lb.

**SARA 304 Emergency release notification**

Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)**

Not applicable.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)****SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous**

See Section 2 for more information.

**SARA 313 (TRI reporting)**

Not regulated.

**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act**

Not regulated.

**Clean Water Act (CWA - Hazardous Substances)**

Listed, RQ: 5000 lb.

**FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace**

Not listed.

**US state regulations**

**US. Massachusetts RTK - Substance List**

Listed.

**US. New Jersey Worker and Community Right-to-Know Act**

Listed.

**US. Pennsylvania Worker and Community Right-to-Know Law**

Listed.

**California Proposition 65**

Not listed.

**SECTION 16: Other information**

Issue date: 09/16/2024

**SECTION 17: Disclaimer**

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.