

## SAFETY DATA SHEET

Creation Date 16-November-2010

Revision Date 19-January-2018

Revision Number 4

### 1. Identification

**Product Name** Sodium sulfide

**Cat No. :** AC310180000; AC310180100; AC310180500; AC310182500

**CAS-No** 1313-82-2

**Synonyms** Sodium sulfide anhydrous; sodium sulfide with <30% water of crystalization; sodium sulphide; sodium monosulfide

**Recommended Use** Laboratory chemicals.

**Uses advised against** Not for food, drug, pesticide or biocidal product use

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

##### Company

**Importer/Distributor**  
Fisher Scientific  
112 Colonnade Road,  
Ottawa, ON K2E 7L6,  
Canada  
Tel: 1-800-234-7437

Acros Organics  
One Reagent Lane  
Fair Lawn, NJ 07410

##### **Manufacturer**

Fisher Scientific  
One Reagent Lane  
Fair Lawn, NJ 07410  
Tel: (201) 796-7100

##### **Emergency Telephone Number**

For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11  
Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99  
**CHEMTREC** Tel. No. **US**:001-800-424-9300 / **Europe**:001-703-527-3887

### 2. Hazard(s) identification

#### Classification

##### **WHMIS 2015 Classification**

Classified as hazardous under the Hazardous Products Regulations (SOR/2015-17)

|  |              |
|--|--------------|
| <b>Corrosive to metals</b>                     | Category 1   |
| <b>Acute oral toxicity</b>                     | Category 3   |
| <b>Acute dermal toxicity</b>                   | Category 3   |
| <b>Skin Corrosion/Irritation</b>               | Category 1 B |
| <b>Serious Eye Damage/Eye Irritation</b>       | Category 1   |
| <b>Combustible Dusts</b>                       | Category 1   |
| <b>Health Hazards Not Otherwise Classified</b> | Category 1   |
| Contact with acids liberates toxic gas         |              |
| Corrosive to the respiratory tract             |              |

#### Label Elements

##### **Signal Word**

Danger

##### **Hazard Statements**

May form combustible dust concentrations in air

May be corrosive to metals  
 Toxic if swallowed or in contact with skin  
 Causes severe skin burns and eye damage  
 Contact with acids liberates toxic gas  
 Corrosive to the respiratory tract



### Precautionary Statements

#### Prevention

Keep container tightly closed  
 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking  
 Take any precaution to avoid mixing with acids  
 Do not breathe dust/fumes/gas/mist/vapours/spray  
 Wear respiratory protection  
 Keep only in original container  
 Wash face, hands and any exposed skin thoroughly after handling  
 Do not eat, drink or smoke when using this product  
 Use only outdoors or in a well-ventilated area  
 Wear protective gloves/protective clothing/eye protection/face protection

#### Response

In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion  
 IF INHALED: Remove person to fresh air and keep comfortable for breathing  
 Immediately call a POISON CENTER/doctor  
 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 Rinse mouth  
 Do NOT induce vomiting  
 Wash contaminated clothing before reuse  
 Absorb spillage to prevent material damage

#### Storage

Store locked up  
 Store in a well-ventilated place. Keep container tightly closed  
 Store in corrosive resistant polypropylene container with a resistant liner  
 Store in a dry place

#### Disposal

Dispose of contents/container to an approved waste disposal plant

#### Other Hazards

Very toxic to aquatic organisms  
 Light sensitive

## 3. Composition/Information on Ingredients

| Component      | CAS-No    | Weight % |
|----------------|-----------|----------|
| Sodium sulfide | 1313-82-2 | 90       |

## 4. First-aid measures

#### General Advice

Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

|  |  |
|--|--|
| <b>Eye Contact</b>                     | In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.   |
| <b>Skin Contact</b>                    | Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.  |
| <b>Inhalation</b>                      | Move 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>Ingestion</b>                       | Do not induce vomiting. Call a physician or Poison Control Center immediately.   |
| <b>Most important symptoms/effects</b> | 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                              |
| <b>Notes to Physician</b>              | Treat symptomatically  |

## 5. Fire-fighting measures

|   |                          |
|---|--------------------------|
| <b>Unsuitable Extinguishing Media</b>   | No information available |
| <b>Flash Point</b>                      | No information available |
| <b>Method -</b>                         | No information available |
| <b>Autoignition Temperature</b>         |                          |
| <b>Explosion Limits</b>                 |                          |
| <b>Upper</b>                            | No data available        |
| <b>Lower</b>                            | No data available        |
| <b>Sensitivity to Mechanical Impact</b> | No information available |
| <b>Sensitivity to Static Discharge</b>  | No information available |

### Specific Hazards Arising from the Chemical

The product causes burns of eyes, skin and mucous membranes. Fine dust dispersed in air may ignite. Do not allow run-off from fire fighting to enter drains or water courses.

### Hazardous Combustion Products

Sulfur oxides Sulfides

### 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.

### NFPA

| Health | Flammability | Instability | Physical hazards |
|--------|--------------|-------------|------------------|
| 3      | 1            | 1           | N/A              |

## 6. Accidental release measures

|   |   |
|---|---|
| <b>Personal Precautions</b>                 | Use personal protective equipment. Evacuate personnel to safe areas. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid dust formation.   |
| <b>Environmental Precautions</b>            | 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. |
| <b>Methods for Containment and Clean Up</b> | Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation.  |

## 7. Handling and storage

|                 |  |
|-----------------|--|
| <b>Handling</b> | Do not get in eyes, on skin, or on clothing. Wear personal protective equipment. Use only under a chemical fume hood. Do not ingest. Do not breathe vapors/dust. Avoid dust formation. |
| <b>Storage</b>  | Keep in a dry place. Keep container tightly closed. Keep away from direct sunlight. Corrosives area. Store under an inert atmosphere. Keep refrigerated.                               |

## 8. Exposure controls / personal protection

|                            |   |
|----------------------------|---|
| <b>Exposure Guidelines</b> | This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies. |
|----------------------------|---|

### Engineering Measures

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

### Personal protective equipment

|                        |                   |
|------------------------|-------------------|
| <b>Eye Protection</b>  | Goggles           |
| <b>Hand Protection</b> | Protective gloves |

| Glove material | Breakthrough time                 | Glove thickness | Glove comments         |
|----------------|-----------------------------------|-----------------|------------------------|
| Natural rubber | See manufacturers recommendations | -               | Splash protection only |
| Nitrile rubber |                                   |                 |                        |
| Neoprene       |                                   |                 |                        |
| PVC            |                                   |                 |                        |

Inspect gloves before use. observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information) gloves are suitable for the task: Chemical compatibility, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion. gloves with care avoiding skin contamination.

### Respiratory Protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. 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.

To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly

**Recommended Filter type:** Particulates filter conforming to EN 143

When RPE is used a face piece Fit Test should be conducted

### Environmental exposure controls

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

### Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use. Wash hands before breaks and at the end of workday.

## 9. Physical and chemical properties

|                       |                          |
|-----------------------|--------------------------|
| <b>Physical State</b> | Powder Solid             |
| <b>Appearance</b>     | Light cream              |
| <b>Odor</b>           | rotten-egg like          |
| <b>Odor Threshold</b> | No information available |

|  |                          |
|--|--------------------------|
| pH                                     | No information available |
| Melting Point/Range                    | No data available        |
| Boiling Point/Range                    | No information available |
| Flash Point                            | No information available |
| Evaporation Rate                       | Not applicable           |
| Flammability (solid,gas)               | No information available |
| Flammability or explosive limits       |                          |
| Upper                                  | No data available        |
| Lower                                  | No data available        |
| Vapor Pressure                         | No information available |
| Vapor Density                          | Not applicable           |
| Specific Gravity                       | No information available |
| Solubility                             | soluble                  |
| Partition coefficient; n-octanol/water | No data available        |
| Autoignition Temperature               |                          |
| Decomposition Temperature              | No information available |
| Viscosity                              | Not applicable           |
| Molecular Formula                      | Na <sub>2</sub> S        |
| Molecular Weight                       | 78.04                    |

## 10. Stability and reactivity

|                                  |  |
|----------------------------------|--|
| Reactive Hazard                  | Yes  |
| Stability                        | Stable under normal conditions. Hygroscopic. Air sensitive. Light sensitive.               |
| Conditions to Avoid              | Exposure to air. Exposure to light. Incompatible products. Exposure to moist air or water. |
| Incompatible Materials           | Acids, Metals, copper  |
| Hazardous Decomposition Products | Sulfur oxides, Sulfides  |
| Hazardous Polymerization         | Hazardous polymerization does not occur.   |
| Hazardous Reactions              | None under normal processing.  |

## 11. Toxicological information

### Acute Toxicity

#### Product Information

#### Component Information

| Component      | LD50 Oral                | LD50 Dermal            | LC50 Inhalation |
|----------------|--------------------------|------------------------|-----------------|
| Sodium sulfide | LD50 = 208 mg/kg ( Rat ) | < 340 mg/kg ( Rabbit ) | Not listed      |

**Toxicologically Synergistic Products** No information available

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

|                 |  |
|-----------------|--|
| Irritation      | Causes severe irritation and or burns  |
| Sensitization   | No information available   |
| Carcinogenicity | The table below indicates whether each agency has listed any ingredient as a carcinogen. |

| Component      | CAS-No    | IARC       | NTP        | ACGIH      | OSHA       | Mexico     |
|----------------|-----------|------------|------------|------------|------------|------------|
| Sodium sulfide | 1313-82-2 | Not listed | Not listed | Not listed | Not listed | Not listed |

**Mutagenic Effects** No information available

**Reproductive Effects** No information available.

|   |  |
|---|--|
| <b>Developmental Effects</b>                      | No information available.  |
| <b>Teratogenicity</b>                             | No information available.  |
| <b>STOT - single exposure</b>                     | None known   |
| <b>STOT - repeated exposure</b>                   | None known   |
| <b>Aspiration hazard</b>                          | No information available   |
| <b>Symptoms / effects, both acute and delayed</b> | 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 |
| <b>Endocrine Disruptor Information</b>            | No information available   |
| <b>Other Adverse Effects</b>                      | The toxicological properties have not been fully investigated.   |

## 12. Ecological information

### Ecotoxicity

The product contains following substances which are hazardous for the environment. Very toxic to aquatic organisms.

| Component      | Freshwater Algae | Freshwater Fish                                     | Microtox                | Water Flea          |
|----------------|------------------|---|-------------------------|---------------------|
| Sodium sulfide | Not listed       | LC50: 7.7 - 29.1 mg/L, 96h<br>(Poecilia reticulata) | EC50 = 4.29 mg/L 15 min | EC50 = 2.1 mg/L 48h |

**Persistence and Degradability** Soluble in water Persistence is unlikely based on information available.

**Bioaccumulation/ Accumulation** No information available.

**Mobility** . Will likely be mobile in the environment due to its water solubility.

| Component      | log Pow    |
|----------------|------------|
| Sodium sulfide | -3.5 - 3.5 |

## 13. Disposal considerations

**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.

## 14. Transport information

### DOT

UN-No UN1385  
 Proper Shipping Name SODIUM SULPHIDE, ANHYDROUS  
 Hazard Class 4.2  
 Packing Group II

### TDG

UN-No UN1385  
 Proper Shipping Name SODIUM SULPHIDE, ANHYDROUS  
 Hazard Class 4.2  
 Subsidiary Hazard Class II

### IATA

UN-No UN1385  
 Proper Shipping Name SODIUM SULPHIDE, ANHYDROUS  
 Hazard Class 4.2  
 Packing Group II

### IMDG/IMO

UN-No UN1385  
 Proper Shipping Name SODIUM SULPHIDE, ANHYDROUS  
 Hazard Class 4.2

Packing Group II

## 15. Regulatory information

All of the components in the product are on the following Inventory lists: X = listed

### International Inventories

| Component      | DSL | NDSL | TSCA | EINECS    | ELINCS | NLP | PICCS | ENCS | AICS | IECSC | KECL |
|----------------|-----|------|------|-----------|--------|-----|-------|------|------|-------|------|
| Sodium sulfide | X   | -    | X    | 215-211-5 | -      |     | X     | X    | X    | X     | X    |

### Canada

SDS in compliance with provisions of information as set out in Canadian Standard - Part 4, Schedule 1 and 2 of the Hazardous Products Regulations (HPR) and meets the requirements of the HPR (Paragraph 13(1)(a) of the Hazardous Products Act (HPA)).

## 16. Other information

**Prepared By** Regulatory Affairs  
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**Creation Date** 16-November-2010

**Revision Date** 19-January-2018

**Print Date** 19-January-2018

**Revision Summary** This document has been updated to comply with the requirements of WHMIS 2015 to align with the Globally Harmonised System (GHS) for the Classification and Labelling of Chemicals.

### Disclaimer

The information provided in 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text

**End of SDS**