

# SAFETY DATA SHEET

## 1. Identification:

| <b>Product Identifier:</b>   | Sodium Sulfide Solution, various dilutions       |  |  |
|------------------------------|--|--|--|
| Product code:                | BS8858 = 1000 ppm                                | BS8879 = 4 ppm                                 |  |
| Synonym(s):                  | Sulfide Standards, aqueous                       | Sulfide Standards, aqueous solutions           |  |
| Recommended use:             | Manufacture of other ch<br>technical activities. | emical products, professional, scientific, and |  |
| Recommended<br>restrictions: | None known.                                      |  |  |

#### Manufacturer/Supplier/Distributor Information

| Company name:              | Biopharm Inc.                               |
|----------------------------|---|
| Address:                   | 187 South Tilley Road<br>Hatfield, AR 71945 |
| Telephone:                 | (870) 389-6114                              |
| Website:                   | www.bphchem.com                             |
| E-mail:                    | support@bphchem.com                         |
| Emergency phone<br>number: | Chemtrec 800-424-9300                       |

## 2. Hazard(s) identification:

| Classification:                            | This product is not categorized as hazardous in any GHS hazard class.                     |
|--|---|
| Label elements:                            | None required.  |
| Signal word:                               | None required.  |
| Hazard statement:                          | None required.  |
| Precautionary statement:                   |   |
| Prevention                                 | Observe good industrial hygiene practices.  |
| Response                                   | Wash hands after handling.  |
| Storage                                    | Store bottles tightly capped and upright. Keep in a cool place away from direct sunlight. |
| Disposal                                   | Dispose of waste and residues in accordance with local authority requirements.            |
| Hazard(s) not otherwise classified (HNOC): | None known.   |
| Supplemental information:                  | None.   |

## 3. Composition/information on ingredients

#### Mixtures

| Chemical Name  | CAS number | <u>%</u> |
|----------------|------------|----------|
| Sodium Sulfide | 1313-84-4  | <1       |
| Water          | 7732-18-5  | Balance  |

## 4. First-aid measures

| Inhalation:   | Move to fresh air. Call a physician if symptoms develop or persist.                       |
|---|---|
| Ingestion:  | Rinse mouth. Get medical attention if symptoms occur.                                     |
| Skin contact:   | Wash with warm water and soap. Get medical attention if irritation develops and persists. |
| Eye contact:  | Irrigate with cool running water. If irritation develops, obtain medical care.            |
| Most important<br>symptoms/effects, acute<br>and delayed: | Direct contact with eyes may cause temporary irritation.                                  |
| General information:                                      | Treat symptomatically.  |

## 5. Fire-fighting measures

| Suitable extinguishing media:  | Any media necessary for extinguishing the surrounding fire. |
|--|---|
| Unsuitable extinguishing media:  | No information available.                                   |
| Specific hazards arising from the chemical                             | None known.   |
| Special protective<br>equipment and<br>precautions for<br>firefighters | Wear approved self-contained protective clothing.           |
| Fire-fighting<br>equipment/instructions                                | Any media necessary for extinguishing the surrounding fire. |

## 6. Accidental release measures

| Personal precautions,<br>protective equipment,<br>and emergency<br>procedures: | Keep unnecessary personnel away.  |
|--|---|
| Methods and materials<br>for containment and<br>cleaning up:                   | Wash spill area with soap and water. Prevent further leakage or spillage if safe to do so.<br>Never return spills to original containers for reuse. For waste disposal, see section 13 of<br>the SDS. |
| Environmental<br>precautions:  | None identified.  |

## 7. Handling and storage

| Precautions for safe handling:                                      | Avoid prolonged exposure. Observe good industrial hygiene practices.                  |
|---|---|
| Conditions for safe<br>storage, including any<br>incompatibilities: | Keep ampoules sealed until needed.<br>Keep in a cool place away from direct sunlight. |

#### 8. Exposure controls/personal protection

| Exposure | Guidelines: |
|----------|-------------|
|----------|-------------|

| <u>Component</u> | ACGIH TLV | <b>OSHA PEL</b> |
|------------------|-----------|-----------------|
|                  |           |                 |

#### SULFIDE STANDARDS, AQUEOUS SOLUTIONS

| Sodium Sulfide                 | No data   | No data   |
|--------------------------------|---|---|
| Engineering measures:          | Ensure that eyewash stations and Ensure adequate ventilation, espec       | safety showers are close to the workstation location. cially in confined areas. |
| Personal protective equipment: |   |   |
| Eye/face protection:           | Wear protective eyeglasses or che   | emical safety goggles.  |
| Skin and body protection:      | Wear appropriate protective gloves and clothing to prevent skin exposure. |   |
| Respiratory protection:        | In case of insufficient ventilation,                                      | wear suitable respiratory equipment.  |
| Hygiene measures:              | Handle in accordance with good i  | ndustrial hygiene and safety practice.  |

## 9. Physical and chemical properties

| · · · ·  |  |
|--|--|
| Appearance:  | Clear  |
| Odor:  | Rotten eggs  |
| Odor threshold:  | No data available.   |
| Vapor Pressure (mm Hg):  | No data available.   |
| Vapor density (Air = 1):   | No data available.   |
| рН:  | No data available.   |
| Relative density:  | No data available.   |
| Melting point/freezing point:  | No data available.   |
| Solubility in Water:   | Miscible   |
| <b>Boiling Point</b> (°F):   | No data available.   |
| Flash point:   | Non-flammable.   |
| Evaporative Rate (H <sub>2</sub> O = 1):   | No data available.   |
| Flammability (solid gas)   | Not applicable   |
| Flammability (solid, gas):   |  |
| Upper/lower flammability or explosiv   |  |
| • • • • • •  |  |
| Upper/lower flammability or explosiv   | ve limits  |
| Upper/lower flammability or explosiv<br>Flammability limit - lower   | ve limits<br>Not applicable.   |
| Upper/lower flammability or explosiv<br>Flammability limit - lower<br>Flammability limit - upper   | ve limits<br>Not applicable.<br>Not applicable.  |
| Upper/lower flammability or explosiv<br>Flammability limit - lower<br>Flammability limit - upper<br>Explosive limit - lower  | ve limits<br>Not applicable.<br>Not applicable.<br>Not applicable.   |
| Upper/lower flammability or explosiv<br>Flammability limit - lower<br>Flammability limit - upper<br>Explosive limit - lower<br>Explosive limit - upper<br>Partition coefficient: n-  | ve limits<br>Not applicable.<br>Not applicable.<br>Not applicable.<br>Not applicable.  |
| Upper/lower flammability or explosiv<br>Flammability limit - lower<br>Flammability limit - upper<br>Explosive limit - lower<br>Explosive limit - upper<br>Partition coefficient: n-<br>octanol/water   | ve limits<br>Not applicable.<br>Not applicable.<br>Not applicable.<br>Not applicable.<br>No data available.  |
| Upper/lower flammability or explosiv<br>Flammability limit - lower<br>Flammability limit - upper<br>Explosive limit - lower<br>Explosive limit - upper<br>Partition coefficient: n-<br>octanol/water<br>Auto-ignition temperature:   | ve limits<br>Not applicable.<br>Not applicable.<br>Not applicable.<br>Not applicable.<br>No data available.<br>No data available   |
| Upper/lower flammability or explosiv<br>Flammability limit - lower<br>Flammability limit - upper<br>Explosive limit - lower<br>Explosive limit - upper<br>Partition coefficient: n-<br>octanol/water<br>Auto-ignition temperature:<br>Decomposition temperature:                                     | ve limits<br>Not applicable.<br>Not applicable.<br>Not applicable.<br>Not applicable.<br>No data available.<br>No data available<br>No data available                      |
| Upper/lower flammability or explosiv<br>Flammability limit - lower<br>Flammability limit - upper<br>Explosive limit - lower<br>Explosive limit - upper<br>Partition coefficient: n-<br>octanol/water<br>Auto-ignition temperature:<br>Decomposition temperature:<br>Viscosity:                       | ve limits<br>Not applicable.<br>Not applicable.<br>Not applicable.<br>Not applicable.<br>No data available.<br>No data available<br>No data available                      |
| Upper/lower flammability or explosiv<br>Flammability limit - lower<br>Flammability limit - upper<br>Explosive limit - lower<br>Explosive limit - upper<br>Partition coefficient: n-<br>octanol/water<br>Auto-ignition temperature:<br>Decomposition temperature:<br>Viscosity:<br>Other information: | ve limits<br>Not applicable.<br>Not applicable.<br>Not applicable.<br>Not applicable.<br>No data available.<br>No data available<br>No data available<br>No data available |

## 10. Stability and reactivity

**Reactivity:** 

Product is stable and non-reactive under ordinary conditions of use, storage and transport.

| Chemical stability:                  | Material is stable under normal conditions. |
|--------------------------------------|---|
| Possibility of hazardous reactions:  | Hazardous polymerization will not occur.    |
| Conditions to avoid:                 | None known.                                 |
| Incompatible materials:              | None known.                                 |
| Hazardous<br>decomposition products: | None known.                                 |

#### 11. Toxicological information

#### Information on likely routes of exposure:

| Ingestion:    | May cause immediate pain and severe burns of the mucous membranes. Depending on<br>the concentration of the solution, swallowing and speech may become become difficult<br>and then impossible. Effects on the esophagus and the gastrointestinal may range from<br>irritation to severe corrosion. May lead to edema of the epiglottis and shock. |
|---------------|--|
| Inhalation:   | Concentrated solutions may cause irritation of the mucous membranes with choking, coughing and pain in the mouth, nose and throat. Hydrogen sulfide gas in the solution may cause headache, irritability, nausea, vomiting and shortness of breath.  |
| Skin Contact: | Direct contact may cause severe irritation, pain and possibly burns, depending on concentration of the solution and length of exposure.  |
| Eye Contact:  | May cause severe irritation with redness, pain, blurred vision and burns, which are slow healing. Blindness may result.  |
| Fa            |  |

## Information on toxicological effects

| Acute toxicity   |           |             |                 |
|------------------|-----------|-------------|-----------------|
| <u>Component</u> | LD50 Oral | LD50 Dermal | LC50 Inhalation |
| Sodium sulfide   | No data   | No data     | No data         |

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

| •                                 | 8 1  |
|-----------------------------------|--|
| Skin corrosion/<br>irritation     | No data available  |
| Serious eye damage/<br>irritation | No data available  |
| Respiratory<br>Sensitization      | No data available.   |
| Skin sensitization                | No data available.   |
| Carcinogenicity                   | This product is not considered to be a carcinogen by IARC, NTP, or OSHA. |
| Mutagenic effects                 | No data available.   |
| <b>Reproductive effects</b>       | No data available.   |
| STOT – single<br>exposure         | No data available.   |
| STOT – repeated<br>exposure       | No data available.   |
| Aspiration hazard                 | No data available.   |
| <b>Chronic effects</b>            | No data available.   |

#### 12. Ecological information

| Ecotoxicity:                      | Not expected to be harmful to aquatic animals.  |
|-----------------------------------|---|
| Persistence and degradability:    | No data available   |
| Bioaccumulation/<br>Accumulation: | No data available   |
| Mobility in soil:                 | No data available   |
| Other adverse effects:            | No adverse environmental effects (e.g. ozone depletion, endocrine disruption, global warming potential) are expected from this component. |

#### 13. Disposal considerations

Waste disposal methods:To be performed in compliance with all current local, state and federal regulations.Spills onto sand, soil, or other absorbent may be handled by placing the affected soil<br/>into approved containers then label and store for proper treatment or disposal.

#### **14. Transport information**

**DOT:** Not regulated as dangerous goods.

#### **15. Regulatory information**

| · negunatory mitor matte  |   |               |
|---------------------------|---|---------------|
| U.S. Federal regulations  |   |               |
| TSCA Section 12(b) Ex     | xport Notification (40 CFR 707, Subpt. D)             | Not regulated |
| U.S. OSHA Specifically    | y Regulated Substances (29 CFR 1910.1001-1050)        | Not regulated |
| <b>CERCLA Hazardous</b> S | Substances List (40 CFR 302.4)                        | Not Listed    |
| Superfund Amendments an   | nd Reauthorization Act of 1986 (SARA)                 |               |
| <b>Hazard</b> Categories  | Immediate Hazard – No                                 |               |
|                           | Delayed Hazard – No                                   |               |
|                           | Fire Hazard – No                                      |               |
|                           | Pressure Hazard – No                                  |               |
|                           | Reactivity Hazard – No                                |               |
| Other Federal regulations |   |               |
| Clean Air Act             | Not applicable  |               |
| <b>Clean Water Act</b>    | Not applicable  |               |
| California Prop 65        | This product does not contain any Proposition 65 chem | icals.        |

#### 16. Other information, including date of preparation or last revision

| <b>Revision date</b> | December 6, 2022   |
|----------------------|--|
| Disclaimer           | The statements contained herein are offered as informational data only and are believed<br>to be correct. However, this product should be handled by persons having related<br>technical skills, and at their own discretion and risk. Since seller has no control over<br>the use of this product, no warranty, expressed or implied, is made and seller assumes<br>no liability in connection with any use of this information or from contact and/or<br>handling of this product. |