

SECTION 1: Identification

1.1. Product Identifier

Trade Name or Designation: Sodium Sulfide, 5% (w/v)

Product Number: R7573000 Other Identifying Product Numbers: R7573000-1C

1.2. Recommended Use and Restrictions on Use

General Laboratory Reagent

1.3. Details of the Supplier of the Safety Data Sheet

Company: Ricca Chemical Company

Address: 448 West Fork Drive Arlington, TX 76012 USA Telephone: 888-467-4222

1.4. Emergency Telephone Number (24 hr)

CHEMTREC (USA) 800-424-9300 CHEMTREC (International) 1+ 703-527-3887

SECTION 2: Hazard(s) Identification

2.1. Classification of the Substance or Mixture (in accordance with OSHA HCS 29 CFR 1910.1200)

For the full text of the Hazard and Precautionary Statements listed below, see Section 16.

| | | Hazard | |
|---|------------|-----------|--|
| Hazard Class | Category | Statement | Precautionary Statements |
| Skin Corrosion / Irritation | Category 2 | H315 | P264, P280, P302+P352, P321, P332+P313, P362 |
| Eye Damage / Irritation | Category 1 | H318 | P280, P305+P351+P338, P310 |
| Specific Target Organs/Systemic Toxicity Following Single | Category 2 | H371 | P260, P264, P270, P308+P311, P405, P501 |
| Exposure | | | |
| Hazardous to the Aquatic Environment (Acute) | Category 2 | H401 | P273, P501 |

2.2. GHS Label Elements

Pictograms:



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Signal Word: Danger

Hazard Statements:

| Hazard Number | Hazard Statement |
|---------------|-----------------------------|
| H315 | Causes skin irritation. |
| H318 | Causes serious eye damage. |
| H371 | May cause damage to organs. |
| H401 | Toxic to aquatic life. |

Precautionary Statements:

| Precautionary Number | Precautionary Statement |
|----------------------|--|
| P260 | Do not breathe dust, fumes or mist. |
| P264 | Wash arms, hands and face thoroughly after handling. |
| P270 | Do not eat, drink or smoke when using this product. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves and eye protection. |
| P302+P352 | IF ON SKIN: Wash with plenty of soap and water. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to d |
| | Continue rinsing. |
| P308+P311 | IF exposed or concerned: Call a POISON CENTER or physician. |
| P310 | Immediately call a POISON CENTER or physician. |
| P321 | Specific treatment (Wash areas of contact with water). |
| P332+P313 | If skin irritation occurs: Get medical attention. |
| P362 | Take off contaminated clothing and wash it before reuse. |
| P405 | Store locked up. |
| P501 | Dispose of contents in accordance with local, state, federal and international regulations. |

2.3. WHMIS Classification

WHMIS classification is not included based on the recommended option (Option 4) found in the Canada Gazette Part II, Vol. 149, No.3, page 458

2.4. Hazards not Otherwise Classified or Covered by GHS

Data not available.

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SECTION 3: Composition / Information on Ingredients

3.1. Components of Substance or Mixture

| Chemical Name | Formula | Molecular Weight | CAS Number | Weight% |
|----------------------------|---------------------|------------------|------------|---------|
| Water | H₂O | 18.01 g/mol | 7732-18-5 | 95.10% |
| Sodium Sulfide Nonahydrate | $Na_2S \cdot 9H_2O$ | 240.18 g/mol | 1313-84-4 | 4.90% |

SECTION 4: First-Aid Measures

4.1. General First Aid Information

- **Eye Contact:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. May cause irritation, redness, pain, and tearing.
 - Inhalation: Not expected to require first aid. If necessary, remove to fresh air.
- Skin Contact: IF ON SKIN: Wash with plenty of soap and water. May cause irritation, redness, and pain.

Ingestion: Dilute with water or milk. Call a physician if necessary.

4.2. Most Important Symptoms and Effects, Acute and Delayed

CAUTION! Liquid may be harmful. Avoid ingestion, and contact with skin, eyes or clothing. If ingested, do not induce vomiting. Dilute with water and call a physician. Wash areas of contact with plenty of water. For eyes, get medical attention. Contact with acids produces toxic Hydrogen Sulfide gas. EYE CONTACT: May cause irritation, redness, pain, and tearing. SKIN CONTACT: May cause irritation, redness, and pain.

4.3. Medical Attention or Special Treatment Needed

Immediately call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water).

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing Media

Use any means suitable for extinguishing surrounding fire.

5.2. Specific Hazards Arising from the Substance or Mixture

Not considered to be a fire or explosion hazard.

5.3. Special Protective Equipment for Firefighters

Use protective clothing and breathing equipment appropriate for the surrounding fire.

SECTION 6: Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Wear protective gloves and eye protection.

6.2. Cleanup and Containment Methods and Materials

Absorb with suitable material and dispose of in accordance with local regulations.

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SECTION 7: Handling and Storage

7.1. Precautions for Safe Handling and Storage Conditions

Store locked up. As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin. Protect from freezing and physical damage. Contact with acid produces Hydrogen Sulfide gas.

SECTION 8: Exposure Controls / Personal Protection

8.1. Control Parameters

| Chemical Name | Limit Type Country | Exposure Limit | Information Source |
|------------------------|--------------------|----------------|--------------------|
| Data not available. () | | | |

8.2. Exposure Controls

Engineering Controls: No specific controls are needed. Normal room ventilation is adequate.

Respiratory Protection: Normal room ventilation is adequate.

Skin Protection: Wear protective gloves and eye protection. Chemical resistant gloves.

Eye Protection: Wear protective gloves and eye protection. Safety glasses or goggles.

8.3. Personal Protective Equipment

Wear protective gloves and eye protection. Normal room ventilation is adequate. Chemical resistant gloves. Safety glasses or goggles.

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SECTION 9: Physical and Chemical Properties

9.1. Basic Physical and Chemical Properties

| Appearance: | Colorless liquid |
|--|---|
| Physical State: | Liquid |
| Odor: | Data not available. |
| Odor Threshold: | Data not available. |
| pH: | Alkaline |
| Melting/Freezing Point: | Approximately 0°C |
| Initial Boiling Point /Range: | Approximately 100°C - Approximately 100°C |
| Flash Point: | Data not available. |
| Evaporation Rate: | Data not available. |
| Flammability: | Data not available. |
| Flammability/Explosive Limits: | Data not available. |
| Vapor Pressure: | Data not available. |
| Vapor Density: | Data not available. |
| Relative Density: | 1.02 |
| Solubility: | Miscible |
| Partition Coefficient (n-Octanol/Water): | Data not available. |
| Auto-Ignition Temperature: | Data not available. |
| Decomposition Temperature: | Data not available. |
| Viscosity: | Data not available. |
| ExplosiveProperties: | Data not available. |
| Oxidizing Properties: | Data not available. |
| | |

SECTION 10: Stability and Reactivity

10.1. Reactivity and Chemical Stability

Stable under normal conditions of use and storage. May tend to darken in color with age.

10.2. Possibility of Hazardous Reactions

Data not available.

10.3. Conditions to Avoid and Incompatible Materials

Acids, Oxidants, Aluminum, Zinc, Carbon.

10.4. Hazardous Decomposition Products

Will not occur.

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SECTION 11: Toxicological Information

11.1. Information on Toxicological Effects

Acute Toxicity - Oral Exposure:

Not applicable.

Acute Toxicity - Dermal Exposure:

Not applicable.

Acute Toxicity - Inhalation Exposure:

Not applicable.

Acute Toxicity - Other Information:

LD50, Oral, Rat: (Sodium Sulfide) no information available.

Skin Corrosion and Irritation:

Causes skin irritation. Wash arms, hands and face thoroughly after handling. Wear protective gloves and eye protection. IF ON SKIN: Wash with plenty of soap and water. Specific treatment (Wash areas of contact with water). If skin irritation occurs: Get medical attention. Take off contaminated clothing and wash it before reuse.

Serious Eye Damage and Irritation:

Causes serious eye damage. Wear protective gloves and eye protection. 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 or physician.

Respiratory Sensitization:

Not applicable.

Skin Sensitization:

Not applicable.

Germ Cell Mutagenicity:

Not applicable.

Carcinogenicity:

Not applicable.

Reproductive Toxicity:

Not applicable.

Specific Target Organ Toxicity from Single Exposure:

May cause damage to organs. Do not breathe dust, fumes or mist. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. IF exposed or concerned: Call a POISON CENTER or physician. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

Specific Target Organ Toxicity from Repeated Exposure:

Not applicable.

Aspiration Hazard:

Not applicable.



Additional Toxicology Information:

Data not available.

SECTION 12: Ecological Information

12.1. Ecotoxicity

Toxic to aquatic life. Avoid release to the environment. Dispose of contents in accordance with local, state, federal and international regulations.

12.2. Persistence and Degradability

Data not available.

12.3. Bioaccumulative Potential

Data not available.

12.4. Mobility in Soil

Data not available.

12.5. Other Adverse Ecological Effects

Data not available.

SECTION 13: Disposal Considerations

13.1. Waste Treatment Methods

Data not available.

SECTION 14: Transportation Information

14.1. Transportation by Land - Department of Transportation (DOT, United States of America)

Not regulated according to DOT Regulations.

SECTION 15: Regulatory Information

15.1. Occupational Safety and Health Administration (OSHA) Hazards

Not listed.



- 15.2. Superfund Amendments and Reauthorization Act (SARA) 302 Extremely Hazardous Substances Not listed.
- 15.3. Superfund Amendments and Reauthorization Act (SARA) 311/312 Hazardous Chemicals Not listed.
- 15.4. Superfund Amendments and Reauthorization Act (SARA) 313 Toxic Release Inventory (TRI) Not listed.
- **15.5. Massachusetts Right-to-Know Substance List** Sodium Sulfide Nonahydrate (CAS # 1313-84-4): Present
- 15.6. Pennsylvania Right-to-Know Hazardous Substances Water (CAS # 7732-18-5): Present
- **15.7. New Jersey Worker and Community Right-to-Know Components** Sodium Sulfide Nonahydrate (CAS # 1313-84-4): corrosive Sodium Sulfide Nonahydrate (CAS # 1313-84-4): sn 1728

15.8. California Proposition 65

Not listed.

15.9. Canada Domestic Substances List / Non-Domestic Substances List (DSL/NDSL) Sodium Sulfide Nonahydrate (CAS # 1313-84-4): Present

Water (CAS # 7732-18-5): Present

15.10. United States of America Toxic Substances Control Act (TSCA) List

Sodium Sulfide Nonahydrate (CAS # 1313-84-4): Present Water (CAS # 7732-18-5): Present

15.11. European Inventory of Existing Commercial Chemical Substances (EINECS),

European List of Notified Chemical Substances (ELINCS), and No Longer Polymers (NLP) Not listed.

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SECTION 16: Other Information

16.1. Full Text of Hazard Statements and Precautionary Statements

Causes skin irritation. Causes serious eye damage. May cause damage to organs. Toxic to aquatic life.

Do not breathe dust, fumes or mist. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment. Wear protective gloves and eye protection.

IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water). If skin irritation occurs: Get medical attention. Take off contaminated clothing and wash it before reuse.

Store locked up.

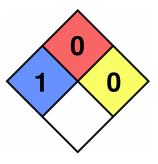
Dispose of contents in accordance with local, state, federal and international regulations.

16.2. Miscellaneous Hazard Classes

Canadian Carcinogenicity Hazard Class: Not Applicable. Physical Hazards Not Otherwise Classified (PHNOC): Not Applicable. Health Hazards Not Otherwise Classified (HHNOC): Not Applicable. Not Applicable.

16.3. National Fire Protection Association (NFPA) Rating

Health: 1 Flammability: 0 Reactivity: 0 Special Hazard:





16.4. Document Revision

Last Revision Date: 5/19/2015

DISCLAIMER

When handled properly by qualified personnel, the product described herein does not present a significant health or safety hazard. Alteration of its characteristics by concentration, evaporation, addition of other substances, or other means may present hazards not specifically addressed herein and which must be evaluated by the user. The information furnished herein is believed to be accurate and represents the best data currently available to us. No warranty, expressed or implied, is made and RICCA CHEMICAL COMPANY assumes no legal responsibility or liability whatsoever resulting from its use.