SECTION I - PRODUCT IDENTIFICATION

Product Name: Sodium Sulfide, 9-Hydrate
Formula: \( \text{Na}_2\text{S} \cdot 9\text{H}_2\text{O} \)
Formula Wt: 240.18
CAS No.: 01313-84-4
NIOSH/RTECS No.: WE1925000
Common Synonyms: Sodium Sulfide, Nonahydrate
Product Codes: 3910,31111

PRECAUTIONARY LABELLING

BAKER SAF-T-DATA™ System

<table>
<thead>
<tr>
<th>HEALTH</th>
<th>FLAMMABILITY</th>
<th>REACTIVITY</th>
<th>CONTACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

Laboratory Protective Equipment

- Safety Glasses
- Lab Coat
- Vent Hood
- Proper Gloves
- Extinguisher

Precautionary Label Statements

WARNING!

FLAMMABLE SOLID
CONTACT WITH ACID LIBERATES POISONOUS GAS.
HARMFUL IF SWALLOWED
CAUSES IRRITATION

Keep away from heat, sparks, flame. Avoid contact with eyes, skin, clothing.
Keep in tightly closed container. Wash thoroughly after handling. In case of fire, soak with water. In case of spill, sweep up and remove. Flush spill area with water.

SECTION II - HAZARDOUS COMPONENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>%</th>
<th>CAS No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Sulfide, 9-Hydrate</td>
<td>90-100</td>
<td>1313-84-4</td>
</tr>
</tbody>
</table>

For information only; anhydrous form

0010
S5042 -01 Sodium Sulfide, 9-Hydrate  
Effective: 10/11/85  
Issued: 06/23/86

SECTION II - HAZARDOUS COMPONENTS (Continued)

SECTION III - PHYSICAL DATA

Boiling Point: N/A  
Vapor Pressure (mmHg): N/A  
Melting Point: 50°C (122°F)  
Vapor Density (air=1): N/A  
Specific Gravity: 1.43  
(H₂O=1)  
Evaporation Rate: N/A  
(S Butyl Acetate=1)

Solubility (H₂O): Appreciable (more than 10 %)  
% Volatiles by Volume: 0

Appearance & Odor: Yellow crystals with odor of hydrogen sulfide.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point: N/A  

Fire Extinguishing Media
Use water spray.

Special Fire-Fighting Procedures
Firefighters should wear proper protective equipment and self-contained breathing apparatus with full facepiece operated in positive pressure mode.
Move containers from fire area if it can be done without risk. Use water to keep fire-exposed containers cool.

Unusual Fire & Explosion Hazards  
Can be an explosion hazard, especially when heated.

Toxic Gases Produced
hydrogen sulfide

SECTION V - HEALTH HAZARD DATA

Toxicity: LD₅₀ (ipr-mouse)(mg/kg) - 53

Effects of Overexposure
Contact with skin or eyes may cause severe irritation or burns.

Emergency and First Aid Procedures
CALL A PHYSICIAN.
If swallowed, if conscious, immediately induce vomiting.
In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Flush skin with water.

Continued on Page: 3
SECTION VI - REACTIVITY DATA

Stability: Stable
Hazardous Polymerization: Will not occur

Conditions to Avoid: heat, flame, sources of ignition

Incompatibles: strong oxidizing agents, strong acids, most common metals

Decomposition Products: hydrogen sulfide

SECTION VII - SPILL AND DISPOSAL PROCEDURES

Steps to be taken in the event of a spill or discharge
Wear self-contained breathing apparatus and full protective clothing. Shut off ignition sources; no flares, smoking, or flames in area. With clean shovel, carefully place material into clean, dry container and cover; remove from area. Flush spill area with water.

Disposal Procedure
Dispose in accordance with all applicable federal, state, and local environmental regulations.

SECTION VIII - PROTECTIVE EQUIPMENT

Ventilation: Use adequate general or local exhaust ventilation to keep fume or dust levels as low as possible.

Respiratory Protection: None required where adequate ventilation conditions exist. If airborne concentration is high, use an appropriate respirator or dust mask.

Eye/Skin Protection: Safety glasses with sideshields, uniform, neoprene gloves are recommended.

SECTION IX - STORAGE AND HANDLING PRECAUTIONS

SAF-T-DATA™ Storage Color Code: Red

Special Precautions
Keep container tightly closed. Store in cool, dry, well-ventilated area away from heat, sparks, or flame. Product must be refrigerated at 2 – 8°C (36 – 46°F).

SECTION X - TRANSPORTATION DATA AND ADDITIONAL INFORMATION

DOMESTIC (D.O.T.)

Proper Shipping Name Corrosive solid, n.o.s. (Sodium Sulfide, 9-Hydrate)
Hazard Class Corrosive material (solid)
S5042 -01 Sodium Sulfide, 9-Hydrate Page: 4
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SECTION X - TRANSPORTATION DATA AND ADDITIONAL INFORMATION (Continued)

UN/NA
Labels

INTERNATIONAL (I.M.O.)

Proper Shipping Name Sodium sulfide, hydrated (30% water min)
Hazard Class 8
UN/NA UN1849
Labels CORROSIVE

N/A = Not Applicable or Not Available

The information published in this Material Safety Data Sheet has been compiled from our experience and data presented in various technical publications. It is the user's responsibility to determine the suitability of this information for the adoption of necessary safety precautions. We reserve the right to revise Material Safety Data Sheets periodically as new information becomes available.