



# J. T. Baker Chemical Co.

222 Red School Lane Phillipsburg, N.J. 08865  
24-Hour Emergency Telephone -- (201) 859-2151

Chemtrec # (800) 424-9300  
National Response Center # (800) 424-8802

## MATERIAL SAFETY DATA SHEET

S5042 -01  
Effective: 10/11/85

Sodium Sulfide, 9-Hydrate

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Issued: 06/23/86

### SECTION I - PRODUCT IDENTIFICATION

Product Name: Sodium Sulfide, 9-Hydrate  
Formula:  $Na_2S \cdot 9H_2O$   
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<sup>TM</sup> System

HEALTH <b>2</b> MODERATE	FLAMMABILITY <b>2</b> MODERATE	REACTIVITY <b>1</b> SLIGHT	CONTACT <b>2</b> MODERATE
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Laboratory Protective Equipment



### 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

Component	%	CAS No.
Sodium Sulfide, 9-Hydrate	90-100	1313-84-4
For information only; anhydrous form		1313-82-2

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SECTION II - HAZARDOUS COMPONENTS (Continued)

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SECTION III - PHYSICAL DATA

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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 Evaporation Rate: N/A  
(H<sub>2</sub>O=1) (Butyl Acetate=1)  
Solubility(H<sub>2</sub>O): Appreciable (more than 10 %) % Volatiles by Volume: 0

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

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SECTION IV - FIRE AND EXPLOSION HAZARD DATA

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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

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SECTION V - HEALTH HAZARD DATA

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Toxicity: LD<sub>50</sub> (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.



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### 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<sup>TM</sup> 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)



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SECTION X - TRANSPORTATION DATA AND ADDITIONAL INFORMATION (Continued)

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UN/NA UN1759  
Labels CORROSIVE

INTERNATIONAL (I.M.O.)

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

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N/A = Not Applicable or Not Available  
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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.