

Sodium Hydrogen Sulfide (hydrate): sc-222322



The Power to Question

MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product Name: Sodium Hydrogen Sulfide (hydrate)

Catalog Number: sc-222322

Supplier: Santa Cruz Biotechnology, Inc.
2145 Delaware Avenue
Santa Cruz, California 95060
800.457.3801 or 831.457.3800

Synonyms: sodium sulfide, hydrate; NSC 158264; Sodium Hydrosulfide;

Emergency:

ChemWatch

Within the US & Canada: 877-715-9305

Outside the US & Canada: +800 2436 2255

(1-800-CHEMCALL) or call +613 9573 3112

2. Hazards Identification

Emergency Overview:

Corrosive.

Harmful.

Avoid contact and inhalation.

Contact with acids liberates toxic gas.

Route(s) of Entry:

Inhalation? Yes Skin? Yes Eyes? Yes Ingestion? Yes Other: Injection

Health Hazards (Acute and Chronic):

Causes burns.

Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.

May be harmful by inhalation, ingestion, or skin absorption.

The toxicological properties of this product have not been fully evaluated.

Signs and Symptoms Of Exposure:

Burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting.

Eye contact may result in severe tissue burns and possible loss of sight.

Inhalation may result in spasm, inflammation, and edema of the larynx and bronchi, pneumonitis, and pulmonary edema.

3. Composition/Information on Ingredients

Hazardous Components (Chemical Name)	CAS #	Concentration	EC#
1. Sodium hydrosulfide hydrate	207683-19-0	100.0 %	240-778-0

4. First Aid Measures

Emergency and First Aid Procedures:

If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate medical attention.

If swallowed, wash out mouth with water provided person is conscious. Never give anything by mouth to an unconscious person. Get medical attention. Do NOT induce vomiting unless directed to do so by medical personnel.

In case of contact with eyes, hold eyelids apart and flush eyes with plenty of water for at least 20 minutes. Have eyes examined and tested by medical personnel.

In case of skin contact, immediately wash skin with soap and plenty of water for at least 20 minutes. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

5. Fire Fighting Measures

Flash Pt:

No data.

Explosive Limits:

LEL: No data.

UEL: No data.

Special Fire Fighting Procedures:

As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.

Unusual Fire and Explosion Hazards:

Emits toxic fumes under fire conditions.

Hazardous Combustion Products:

No data available.

Suitable Extinguishing Media:

Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray.

Use water spray to cool fire-exposed containers.

Unsuitable Extinguishing Media:

A solid water stream may be inefficient.

6. Accidental Release Measures

Steps To Be Taken In Case Material Is Released Or Spilled:

Avoid release into the environment.
Avoid raising and breathing dust, and provide adequate ventilation.
As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator, and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves).
Transfer to a proper chemical waste container for disposal.

7. Handling and Storage

Hazard Label Information:

Avoid contact with skin and eyes. Do not reuse this container. Use with adequate ventilation.
Wash thoroughly after handling

Precautions To Be Taken in Handling:

Avoid breathing (dust, vapor, mist, gas).
Avoid prolonged or repeated exposure.

Precautions To Be Taken in Storing:

Keep tightly closed.
Protect from sunlight.
Store at room temperature.
Store away from acids.
Store in well-ventilated place.

Other Precautions:

Hygroscopic.

8. Exposure Controls/Personal Protection

Hazardous Components (Chemical Name)	CAS #	OSHA PEL	ACGIH TLV	Other Limits
1. Sodium hydrosulfide hydrate	207683-19-0	No data.	No data.	No data.
Protective Equipment Summary - Hazard Label Information:	Compatible chemical-resistant gloves Eye wash station in work area Lab coat Safety glasses Safety shower in work area Vent Hood			
Respiratory Equipment (Specify Type):	NIOSH approved respirator, as conditions warrant.			
Eye Protection:	Safety glasses			
Protective Gloves:	Compatible chemical-resistant gloves			
Other Protective Clothing:	Lab coat			
Ventilation:	Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.			
Work/Hygienic/Maintenance Practices:	Do not take internally. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Wash thoroughly after handling.			

9. Physical and Chemical Properties

Physical States:	<input type="checkbox"/> Gas <input type="checkbox"/> Liquid <input checked="" type="checkbox"/> Solid
Melting Point:	53.00 C - 56.00 C
Boiling Point:	No data.
Autoignition Pt:	No data.
Flash Pt:	No data.
Explosive Limits:	LEL: No data. UEL: No data.
Specific Gravity (Water = 1):	No data.
Bulk density:	No data.
Vapor Pressure (vs. Air or mm Hg):	No data.
Vapor Density (vs. Air = 1):	No data.
Evaporation Rate (vs Butyl Acetate=1):	No data.
Solubility in Water:	No data.
Solubility Notes:	~10 mg/ml in PBS (pH 7.2); ~3 mg/ml in EtOH, DMF & DMSO;
Percent Volatile:	No data.
Heat Value:	No data.
Particle Size:	No data.
Corrosion Rate:	No data.

Formula: HNaS · XH₂O
Molecular Weight: 56.10
pH: No data.
Appearance and Odor: A crystalline solid. Stench!

10. Stability and Reactivity

Stability: Unstable [] Stable [X]
Conditions To Avoid - Instability: sunlight, heat, moisture, and air
Incompatibility - Materials To Avoid: acids
aluminium
copper
copper alloys
strong oxidizing agents
zinc
Hazardous Decomposition Or Byproducts: nitrogen oxides
sulfur oxides
Possibility of Hazardous Reactions: Will occur [] Will not occur [X]
Conditions To Avoid - Hazardous Reactions: No data available.

11. Toxicological Information

: The toxicological effects of this product have not been thoroughly studied.
Carcinogenicity/Other Information: No data available.
Carcinogenicity: NTP? No IARC Monographs? No OSHA Regulated? No

12. Ecological Information

: Avoid release into the environment.
Runoff from fire control or dilution water may cause pollution.

13. Disposal Considerations

Waste Disposal Method: Dispose in accordance with local, state, and federal regulations.

14. Transport Information

LAND TRANSPORT (US DOT)

DOT Proper Shipping Name Sodium hydrosulphide hydrated
DOT Hazard Class: 8
DOT Hazard Label: CORROSIVE
UN/NA Number: 2949
Packing Group: II

LAND TRANSPORT (European ADR/RID)

ADR/RID Proper Shipping Name Sodium hydrosulphide hydrated
UN Number: 2949
Packing Group: II

AIR TRANSPORT (ICAO/IATA)

ICAO/IATA Proper Shipping Name Sodium hydrosulphide hydrated
UN Number: 2949
Packing Group: II
IATA Classification: 8

Additional Transport Information: Transport in accordance with local, state, and federal regulations.

15. Regulatory Information

European Community Hazard Symbol codes C: Corrosive; Xn: Harmful

European Community Risk and Safety Phrases

R31 - Contact with acids liberates toxic gas.
R34 - Causes burns.
S25 - Avoid contact with eyes.
S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.
S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label whenever possible.)

US EPA SARA Title III

Hazardous Components (Chemical Name)	CAS #	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
1. Sodium hydrosulfide hydrate	207683-19-0	No	No	No	No

US EPA CAA, CWA, TSCA

Hazardous Components (Chemical Name)	CAS #	EPA CAA	EPA CWA NPDES	EPA TSCA	HPV/LPV
1. Sodium hydrosulfide hydrate	207683-19-0	HAP, ODC ()	No	No	

16. Other Information

The above information is believed to be correct but does not purport to be complete and should be used only as a guide. The burden of safe use of this material rests entirely with the user.

8/1/2011