

Material Safety Data Sheet

Sodium Hydrosulfide

Section 1: Chemical Product and Company Identification

Product Name : Sodium Hydrosulfide
Chemical Formula : NaHS
Company Identification : Tradeasia International Pte Limited
Email : contact@chemtradeasia.com

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Sodium Hydrosulfide	16721-80-5	72

Toxicological Data on Ingredients: Sodium Hydrosulfide: LD50: Not Available

Section 3: Hazards Identification

Potential Acute Health Effects:

Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant).

Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: 3 (Not classifiable for human.) by IARC. MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance may be toxic to kidneys, liver, skin. Repeated or prolonged exposure to the substance can produce target organs damage.

Section 4: First Aid Measures

Eye Contact:

Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Get medical attention immediately.

Skin Contact:

If spilt on large areas of skin or hair, immediately drench with running water and remove clothing. Continue to wash skin and hair with plenty of water (and soap if material is insoluble) until advised to stop a doctor. For skin burns, cover with a clean, dry dressing until medical help is available. Wash clothing before reuse

Serious Skin Contact: Not available.

Inhalation:

Remove victim from area of exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. If patient finds breathing difficult and develops a bluish discoloration of the skin ensure airways are clear of any obstruction and have a qualified person give oxygen through a face mask. Apply artificial respiration if patient is not breathing. Seek immediate medical advice.

Serious Inhalation: Not available.

Ingestion:

If swallowed, do not induce vomiting unless directed to do so by medical personnel. Have victim drink as much milk or water as possible. Never give anything by mouth to an unconscious person.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: Hydrogen sulfide can collect in confined spaces above this product especially when it is not in sealed containers Hydrogen sulfide forms flammable mixtures with air from about 4% by volume to about 45%.

Auto-Ignition Temperature: Not available.

Flash Points: Not applicable.

Flammable Limits: Not available.

Products of Combustion: Poisonous sulfur dioxide gas will be generated if this product burns.

Fire Hazards in Presence of Various Substances:

Poison, flammable hydrogen sulfide gas will be evolved from this product on exposure to acid or excessive heat.

Explosion Hazards in Presence of Various Substances:

Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions: Firefighters should wear self-contained breathing apparatus. Do not use carbon dioxide fire extinguishers because toxic hydrogen sulfide gas will be liberated from this product.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Not available.

Section 6: Accidental Release Measures

Small Spill:

Avoid contact with water. Scoop up and store in sealed containers. Dispose of in accordance with local, state, or federal regulations.

Large Spill:

Recover as much of the material as possible. Mix spilled material with dilute excess hydrogen peroxide to oxidize sulfide and eliminate danger of hydrogen sulfide evolution.

Section 7: Handling and Storage

Precautions:

Avoid skin and eye contact and breathing in dust.

Storage:

Store in a cool, dry, well ventilated place and out of direct sunlight. Store under inert gas. Do not store in aluminium, copper, or zinc containers. Keep containers closed when not in use - check regularly for spills.

Section 8: Exposure Controls/Personal Protection

Engineering Controls:

Adequate ventilation is required to remove the toxic and flammable dust and fumes which may be present. Safety shower and eyewash fountain should always be available in the work area.

Personal Protection:

Rubber suits and boots. Chemical safety goggles and safety shield. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Dust respirator. Boots. Gloves. Use self-contained breathing apparatus or supplied-air respirator in confined areas where the PEL for hydrogen sulfide might be exceeded. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits: Not available

Section 9: Physical and Chemical Properties

Physical state and appearance	: Solid flakes
Odor	: Rotten egg odour
Taste	: Not available.
Molecular Weight	: 149.19 g/mole
Color	: Light yellow.
pH (1% soln/water)	: 12.5 [Highly alkaline]
Boiling Point	: 165°C (329°F)
Melting Point	: 54°C (129°F)
Critical Temperature	: Not available.
Specific Gravity	: 1.45 (Water = 1)
Vapor Pressure	: Not available.
Vapor Density	: Not available.
Volatility	: Not available.
Odor Threshold	: Not available.
Water/Oil Dist. Coeff.	: Not available.
Ionicity (in Water)	: Not available.
Dispersion Properties	: Not available.

Solubility:

Completely soluble in water.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Avoid exposure to moisture. Avoid exposure to heat, sources of ignition, and open flame. Avoid dust generation.

Incompatibility with various substances: Incompatible with acids, water, moisture, carbon, diazonium salts, oxidising agents.

Corrosivity: Corrosive to aluminium, copper, and zinc.

Special Remarks on Reactivity: Hygroscopic: absorbs moisture or water from surrounding air.

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Ingestion, skin absorption, and inhalation.

Toxicity to Animals: Oral LD50 (rat): 200 mg/kg

Chronic Effects on Humans: CARCINOGENIC EFFECTS: Unknown. MUTAGENIC EFFECTS: Unknown. TERATONIC EFFECTS: Unknown.

Other Toxic Effects on Humans:

Hazardous in case of skin contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant).

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not a known carcinogen. Chronic acute exposures to dust may cause neurologic deficits like those in survivors of other severe asphyxiant poisonings.

Special Remarks on other Toxic Effects on Humans:

Acute Potential Health Effects: Skin: Contact with skin will result in severe irritation. Corrosive to skin - may cause skin burns. Eyes: Corrosive to eyes; contact can cause corneal burns. Contamination of eyes can result in permanent injury. Ingestion: Swallowing can result in nausea, vomiting, diarrhoea, abdominal pain and chemical burns to the gastrointestinal tract. Inhalation: Breathing in dust may result in respiratory irritation. Chronic Potential Health Effects: May cause impaired memory, paralysis, impairment of the central nervous system.

Section 12: Ecological Information

Ecotoxicity: Avoid contaminating waterways.

BOD5 and COD: Not available.

Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The product itself and its products of degradation are not toxic.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal:

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14: Transport Information

DOT Classification: Sodium hydrosulfide, 72% Flake.

Identification: : Not applicable.

Special Provisions for Transport: Not applicable.

Section 15: Other Regulatory Information

Federal and State Regulations:

Rhode Island RTK hazardous substances: Triethanolamine
Pennsylvania RTK: Triethanolamine
Minnesota: Triethanolamine
Massachusetts RTK: Triethanolamine
TSCA 8(b) inventory: Triethanolamine
TSCA 8(d) H and S data reporting: Triethanolamine

Other Regulations:

This product is listed as a hazardous material under criteria of the Federal OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Other Classifications:

WHMIS (Canada): E, D1.

DSCL (EEC):

R17-Spontaneously flammable in air. R23-Toxic by inhalation. R24-Toxic if in contact with skin. R25-Toxic if swallowed. S2- Keep out of the reach of children. S36/37- Wear suitable protective clothing and gloves. S46- If swallowed, seek medical advice immediately and show this container or label.

HMIS (U.S.A.):

Health Hazard: 3

Fire Hazard: 1

Reactivity: 1

Personal Protection:

National Fire Protection Association (U.S.A.):

Health: 3

Flammability: 2

Reactivity: 1

Specific hazard:

Protective Equipment:

Gloves. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent.
Splash goggles.

Section 16: Other Information

References: Not available.

Other Special Considerations: Not available.

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