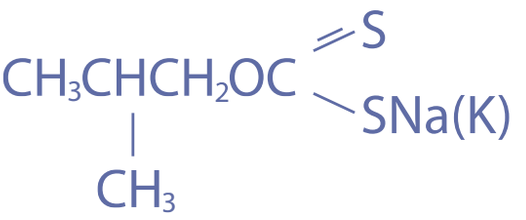

NaHS

Identification of product and company

Identification of the substance

Product name: Sodium hydrosulfide
Synonyms: Sodium bisulfide; Sodium sulfhydrate; Sodium hydrogen sulfide
CAS Number: 16721-80-5; 207683-19-0 (hydrate)
EC Number: 240-778-0
Molecular formula: NaHS
Description/Recommended Use: Paper pulping, dyestuffs processing, rayon and cellophane desulfurising, unhairing hides, bleaching agent.

Company/Undertaking Identification

Company name: VictoriaFortress
Address: Unit 2108. CC Wu Build. 308 Hennessy Road Wanchai Hong Kong
Telephone: +852-54892941
Fax: +852-39544488
E-mail: info@vf-hk.com
Http: www.vf-chem.com
For Emergency Assistance, please call 86 24 74570273

Hazards Identification

This material is hazardous according to criteria of Safe Work Australia; HAZARDOUS SUBSTANCE.

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; DANGEROUS GOODS.

Risk Phrases: Harmful if swallowed. Contact with acids liberates toxic gas. Risk of serious damage to eyes.

Safety Phrases: Do not breathe dust. Avoid contact with eyes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear eye / face protection. If swallowed, seek medical advice immediately and show this container or label.

Poisons Schedule: S5 Caution.

Composition/information on ingredients

Name	*CAS#*	*Proportion*
Sodium hydrosulfide	16721-80-5	99%

First aid measures

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. Seek medical advice if effects persist.

Ingestion: Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water. Seek medical advice.

Skin Contact: If skin or hair contact occurs, immediately remove any contaminated clothing and wash skin and hair thoroughly with running water. If swelling, redness, blistering or irritation occurs seek medical assistance.

Eye Contact: If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre or a doctor, or for at least 15 minutes.

Medical Attention & Special treatment: Treat symptomatically. Can cause corneal burns.

Firefighting measures

Hazards from combustion products: Non-combustible material.

Precautions for fire fighters and special protective equipment: Decomposes on heating emitting toxic fumes, including those of hydrogen sulfide, and oxides of sulfur. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to products of decomposition

Suitable Extinguishing Media: Not combustible, however, if material is involved in a fire use: Fine water spray, normal foam, dry agent (carbon dioxide, dry chemical powder).

Accidental release measure

Emergency procedures: Use personal protective equipment. Ensure adequate ventilation. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Avoid dust formation. Do not get in eyes, on skin, or on clothing. Should not be released into the environment.

Methods and materials for containment and clean up: Wear protective equipment to prevent skin and eye contact and breathing in dust. Work up wind or increase ventilation. Cover with damp absorbent (inert material, sand or soil). Sweep or vacuum up, but avoid generating dust. Collect and seal in properly labelled containers or drums for disposal. Wash area down with excess water.

Handling and storage

Precautions for safe handling: Handle and open container with care. Use only with adequate ventilation. Wear appropriate personal protective equipment, avoid direct contact. Do not breathe dust. Do not get in eyes, on skin, or on clothing. Do not ingest. Add this product only to water. Never add water to this product. Do not add to

warm or hot water, a violent eruption or explosive reaction can result. May cause fire or explosion. Avoid contact with organic materials. Take any precaution to avoid mixing with strong acids. When making solutions or diluting, only add caustic soda slowly to surface of cold water while stirring. Attacks many metals producing extremely flammable hydrogen gas which can form explosive mixtures with air. Caustic soda may react with various sugars to generate carbon monoxide. Hazardous carbon monoxide gas can form upon contact with food and beverage products in enclosed vessels and can cause death. Empty containers retain product residue and can be hazardous. Do not reuse container. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

Conditions for safe storage: Ventilate enclosed areas. Keep only in the original container. Keep container tightly closed. Keep away from incompatible materials. Store in a cool, dry, well-ventilated place.

Exposure Controls/Personal Protection

Engineering Controls: Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection: Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

Protective equipment: The selection of PPE is dependant on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors. OVERALLS, SAFETY SHOES, SAFETY GLASSES, GLOVES, DUST MASK.

Exposure Limits: No value assigned for this specific material by the National Occupational Health and Safety Commission. However, Exposure Standard(s) for particulates: Dusts not otherwise classified: 8hr TWA = 10 mg/m3

Physical and Chemical Properties

Physical state: Chips or Flakes
Odour: Rotten egg
Molecular Formula: HNaS.2H2O
Molar mass: 56.063 g/mol
Density: 1.79 g/cm3
Solubility: Soluble in water.
Melting point: 55°C
Boiling point: 150°C
Autoignition Temperature: 120°C
Specific Gravity: 1.5
pH: 11 (10g/L water)

Stability and Reactivity Data

Chemical stability: Deliquescent. Corrosive to aluminium, copper, and zinc.

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

Incompatible materials: Incompatible with acids, water, moisture, carbon, diazonium salts, and oxidising agents.

Hazardous Decomposition Products: Hydrogen sulfide. Oxides of sulfur.

Hazardous reactions: Sodium hydrosulfide releases highly toxic and highly flammable hydrogen sulfide gas if mixed with an acid or if exposed to excessive heat. Hydrogen sulfide has a pungent rotten egg odour.

Toxicological Information

Acute Potential Health Effects:

Skin: May be harmful if absorbed through skin. Causes severe skin irritation and burns. May cause deep penetrating ulcers of the skin.

Eyes: Causes severe eye irritation and burns. May cause chemical conjunctivitis and corneal damage.

Inhalation: Harmful if inhaled. Causes severe irritation of the respiratory tract and mucous membranes with coughing, burns, breathing difficulty, and possible coma. Irritation may lead the chemical pneumonitis and pulmonary edema. Causes chemical burns to the respiratory tract and mucous membranes.

Ingestion: May be fatal if swallowed. May cause severe and permanent damage to the digestive tract. Causes severe gastrointestinal tract irritation and burns. May cause perforation of the digestive tract. Causes severe pain, nausea, vomiting, diarrhea, and shock. May cause corrosion and permanent destruction of the esophagus and digestive tract.

Ecological Information

Ecotoxicity: Avoid contaminating waterways

Terrestrial toxicity: Very toxic to terrestrial species.

Disposal considerations

Disposal methods: Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

Transport Information

Road and Rail Transport

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

UN No: 2949
Class-primary: 8 Corrosive
Packing Group: II
Proper Shipping Name: SODIUM HYDROSULPHIDE, HYDRATED
Hazchem Code: 2X

Marine Transport

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

UN No: 2949
Class-primary: 8 Corrosive
Packing Group: II
Proper Shipping Name: SODIUM HYDROSULPHIDE, HYDRATED
Hazchem Code: 2X
IMDG EMS Fire: F-A
IMDG EMS Spill: S-B

Air Transport

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

UN No: 2949
Class-primary: 8 Corrosive
Packing Group: II
Proper Shipping Name: SODIUM HYDROSULPHIDE, HYDRATED

Other Information

This material is hazardous according to criteria of Safe Work Australia; HAZARDOUS SUBSTANCE

Risk Phrase(s): Contact with acids liberates toxic gas. Causes burns. Risk of serious damage to eyes

Safety Phrase(s): Do not breathe dust. Avoid contact with skin and eyes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves and eye/face protection.

Poisons Schedule: None Allocated.