

FLINN SCIENTIFIC, INC.

Material Safety Data Sheet (MSDS)

MSDS #: 399.00

Revision Date: December 14, 2011

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Hydrogen Sulfide Solution

Flinn Scientific, Inc. P.O. Box 219 Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

SECTION 2 — COMPOSITION, INFORMATION ON INGREDIENTS

Hydrogen sulfide (7783-06-4) <4% and Water (7732-18-5) >96%.

CAS#: None established

SECTION 3 — HAZARDS IDENTIFICATION

Colorless aqueous solution. Rotten egg odor.

Hazardous vapor; strong irritant to eyes and mucous membranes; and moderately toxic by ingestion and inhalation. Avoid ingestion, inhalation and skin absorption.

When heated, emits toxic and flammable fumes of hydrogen sulfide.

FLINN AT-A-GLANCE

Health-2

Flammability-1

Reactivity-1

Exposure-1

Storage-2

0 is low hazard, 3 is high hazard

SECTION 4 — FIRST AID MEASURES

Call a physician and seek medical attention for further treatment, observation, and support after first aid.

Inhalation: Remove to fresh air at once. If breathing has stopped, give artificial respiration immediately.

Eye or External: Immediately flush with fresh water for at least 15 minutes.

Internal: Rinse mouth. Give large quantities of water for dilution. Call a physician or poison control at once.

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable liquid.

When heated to decomposition, emits toxic and flammable fumes of hydrogen sulfide.

Fire Fighting Instructions: Use a triclass, dry chemical fire extinguisher. Firefighters should wear PPE and SCBA with full facepiece operated in positive pressure mode.

NFPA CODE

None

established

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Restrict unprotected personnel from the area and ventilate area. Contain the spill with sand or absorbent material and deposit in a sealed bag or container. See Sections 8 and 13 for further information.

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Inorganic #5. Store with sulfides, phosphides, carbides, and nitrides.

Store away from sources of heat. Store in a Flinn Chem-Saf bag and then inside a Flinn Saf-Stor can.

Keep container tightly closed. Use and dispense in a hood.

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and a chemical-resistant apron. Use ventilation to keep airborne concentrations below exposure limits. Always wear a NIOSH-approved respirator with proper cartridges or a positive pressure, air-supplied respirator when handling this material in emergency situations (spill or fire).

Exposure guidelines: TWA 10 ppm (gas), STEL 15 ppm (gas) (ACGIH, ACGIH)

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Colorless liquid with a rotten egg odor.
Solubility: Soluble in water and alcohol.
4% hydrogen sulfide (w/v)

Boiling point: 100 °C

SECTION 10 — STABILITY AND REACTIVITY

Shelf life: Fair, reacts with oxygen to precipitate elemental sulfur. Keep tightly closed.

Reactivity: Reacts with oxidants.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Irritant.

Chronic effects: N.A.

Target organs: N.A.

ORL-RAT LD₅₀: N.A.

IHL-RAT LC₅₀: 713 ppm/hr as H₂S vapor

SKN-RBT LD₅₀: N.A.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

SECTION 13 — DISPOSAL CONSIDERATIONS

Please review all federal, state and local regulations that may apply, before proceeding.

Flinn Suggested Disposal Method #23 is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: N/A

Hazard class: N/A

UN number: N/A

N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

Not listed.

SECTION 16 — OTHER INFORMATION

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**Consult your copy of the *Flinn Science Catalog/Reference Manual*
for additional information about laboratory chemicals.**