

# 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)

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**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

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

Boiling point: 100 °C

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**SECTION 10 — STABILITY AND REACTIVITY**

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

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**SECTION 11 — TOXICOLOGICAL INFORMATION**

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Acute effects: Irritant.  
Chronic effects: N.A.  
Target organs: N.A.

ORL-RAT LD<sub>50</sub>: N.A.  
IHL-RAT LC<sub>50</sub>: 713 ppm/hr as H<sub>2</sub>S vapor  
SKN-RBT LD<sub>50</sub>: N.A.

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

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**SECTION 12 — ECOLOGICAL INFORMATION**

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Data not yet available.

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**SECTION 13 — DISPOSAL CONSIDERATIONS**

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Please review all federal, state and local regulations that may apply, before proceeding.  
Flinn Suggested Disposal Method #23 is one option.

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**SECTION 14 — TRANSPORT INFORMATION**

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Shipping name: N/A  
Hazard class: N/A  
UN number: N/A  
N/A = Not applicable

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**SECTION 15 — REGULATORY INFORMATION**

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Not listed.

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**SECTION 16 — OTHER INFORMATION**

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