

# FLINN SCIENTIFIC INC.

"Your Safer Source for Science Supplies"

## Material Safety Data Sheet (MSDS)

MSDS #: 68.00

Revision Date: November 25, 2002

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### Section 1 — Chemical Product and Company Identification

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#### Ammonium Sulfide

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

CHEMTREC Emergency Phone Number: (800) 424-9300

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### Section 2 — Composition, Information on Ingredients

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Ammonium Sulfide, Light; or Ammonium Sulfide, Dark

CAS#: 12135-76-1

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### Section 3 — Hazards Identification

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Liquid; light is yellow color, and dark is amber color, both with odor of ammonia and hydrogen sulfide. Contact with acids or acid fumes may liberate flammable and poisonous hydrogen sulfide gas. Strong skin and mucous membrane irritant; toxic by skin absorption; vapor harmful, even low concentrations may cause headache and general discomfort.

#### FLINN AT-A-GLANCE

Health-2  
Flammability-2  
Reactivity-2  
Exposure-2  
Storage-3

0 is low hazard, 3 is high hazard

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### Section 4 — First Aid Measures

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Call a physician, 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: Immediately flush with fresh water for 15 minutes.

External: Wash continuously with fresh water for 15 minutes.

Internal: Give no more than 1-2 cups of water for dilution. Do not induce vomiting. Call a physician or poison control at once.

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### Section 5 — Fire Fighting Measures

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Flammable liquid. Liberates flammable and toxic hydrogen sulfide gas.

Flash Point: 90 F UEL: 46% LEL: 4%

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

#### NFPA CODE

None Established

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### Section 6 — Accidental Release Measures

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Restrict unprotected personnel from area. Remove all ignition sources and ventilate area. Contain spill with sand and absorbent material; deposit in sealed bag or container. See Sections 8 and 13 for further information.

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### Section 7 — Handling and Storage

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

Store in a dedicated flammables cabinet. If a flammables cabinet is not available, store in Flinn Saf-Stor can.

Use and dispense in a hood.

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### Section 8 — Exposure Controls, Personal Protection

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Avoid contact with eyes, skin and clothing. Wear chemical splash goggles, chemical-resistant gloves and chemical-resistant apron.

Use exhaust ventilation to keep airborne concentrations low.

### Section 9 — Physical and Chemical Properties

Dark liquid: 22% sulfur; 8% ammonia, amber color;  
Light liquid: 8% sulfur, 8% ammonia, yellow color  
Solubility: Water soluble (100 %), alcohol and alkalies  
Formula: (NH<sub>4</sub>)<sub>2</sub>S+ water

Specific Gravity: (light) 1.01 (dark) 1.06  
Vapor Pressure: 450 mm (20 C)  
Vapor Density: 2.3

### Section 10 — Stability and Reactivity

Avoid contact with strong oxidizers, acids, bases, aluminum, zinc and copper.  
Avoid heat.  
Shelf life: good if stored safely.

### Section 11 — Toxicological Information

Acute effects: Toxic, corrosive, nausea, headache and vomiting  
Chronic effects: N.A.  
Target organs: N.A.

ORL-RAT LD50: N.A.  
IHL-RAT LC50: N.A.  
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 consult with state and local regulations.  
Flinn Suggested Disposal Method #23 is one option.

### Section 14 — Transport Information

Shipping Name: Ammonium Sulfide Solution  
Hazard Class: 8, Corrosive, Poison, Flammable Liquid  
UN Number: UN2683

N/A = Not applicable

### Section 15 — Regulatory Information

TSCA-listed, EINECS-listed (235-223-4), RCRA code D001, D003.

### Section 16 — Other Information

Consult your copy of the Flinn Scientific Catalog/Reference Manual for additional information about laboratory chemicals. This Material Safety Data Sheet (MSDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. Flinn Scientific Inc. assumes no legal responsibility for use or reliance upon this data.

**FLINN SCIENTIFIC INC.**

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