

# FLINN SCIENTIFIC INC.

"Your Safer Source for Science Supplies"

## Material Safety Data Sheet (MSDS)

MSDS #: 80.10

Revision Date: November 25, 2002

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### Section 1 — Chemical Product and Company Identification

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#### Arsenic

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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Arsenic

CAS#: 7440-38-2

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### Section 3 — Hazards Identification

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Silver-grey crystalline, brittle solid, or grey powder.

Darkens upon exposure to moist air.

Moderately toxic; known Carcinogen. Avoid all body contact. May be fatal if ingested, inhaled or absorbed through the skin. Practice strict hygiene.

#### FLINN AT-A-GLANCE

Health-2

Flammability-1

Reactivity-1

Exposure-3

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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Non-flammable, non-combustible solid.

Releases toxic fumes at high temperature.

Flammable in the form of dust when exposed to heat or flame or by chemical reactions.

**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 water. Sweep up, place in sealed bag or container and dispose. Ventilate area and wash spill site after material pickup is complete. 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 #10. Store with sulfur and phosphorus.

Store in a Flinn Chem-Saf Bag or in a Flinn Chem-Saf Cube. Store in a poison cabinet. 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 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 0.01 mg/m<sup>3</sup> (OSHA)

### Section 9 — Physical and Chemical Properties

Silver-grey crystalline, brittle solid  
Solubility: Insoluble in water. Soluble in HNO<sub>3</sub>  
Formula: As  
Formula Weight: 74.92

Specific Gravity: 5.72.  
Melting Point: 814 C.  
Sublimes at 613 C.

### Section 10 — Stability and Reactivity

When heated or on contact with acid or acid fumes, it emits highly toxic fumes; can react vigorously on contact with oxidizing materials. Hydrogen gas can react with inorganic arsenic to form the highly toxic gas arsine.

Shelf life: Indefinite.

### Section 11 — Toxicological Information

Acute effects: Moderately toxic  
Chronic effects: OSHA regulated carcinogen  
Target organs: Skin, lungs

ORL-RAT LD50: 763 mg/kg  
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 #27d is one option.

### Section 14 — Transport Information

Shipping Name: Arsenic  
Hazard Class: 6.1, Poison  
UN Number: UN1558

N/A = Not applicable

### Section 15 — Regulatory Information

TSCA-listed, EINECS-listed (231-148-6), RCRA code D004.

### 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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*Flinn--"Your Safer Source for Chemicals"*

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