

# FLINN SCIENTIFIC INC.

"Your Safer Source for Science Supplies"

## Material Safety Data Sheet (MSDS)

MSDS #: 407.00

Revision Date: November 25, 2002

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### Section 1 — Chemical Product and Company Identification

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#### Iodine

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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Iodine

CAS#: 7553-56-2

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### Section 3 — Hazards Identification

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Gray-black flakes, metallic luster, characteristic odor.  
Highly toxic by ingestion and inhalation.  
Irritating and corrosive to skin. Avoid all body contact.

#### FLINN AT-A-GLANCE

Health-3  
Flammability-0  
Reactivity-2  
Exposure-3  
Storage-1

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: Rinse out mouth, give 1 to 2 cups of water or milk, 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, noncombustible solid.

When heated to decomposition, emits toxic fumes of iodide and various iodine compounds.

**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. 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 #2. Store with acetates, halides, sulfates, sulfites, thiosulfates and phosphates. Store in a cool dry place. Store in a Flinn Chem-Saf bag; the substance sublimates. Frequently oxidizes metal shelves or metal containers in proximity to the iodine. 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: ceiling 0.1 ppm (OSHA)

### Section 9 — Physical and Chemical Properties

Gray-black flakes, metallic luster, characteristic odor.  
Solubility: Soluble in alcohol and other organic solvents;  
not in water.

Formula: I<sub>2</sub>

Formula Weight: 253.80

Boiling Point: 185.24 C

Specific gravity: 4.98

Melting Point: 113.5 C

### Section 10 — Stability and Reactivity

Avoid contact with magnesium, zinc, ammonia, aluminum, corrodes steel. Reacts violently with acetaldehyde.  
Shelf Life: Fair; the substance sublimates. Frequently oxidizes metal shelves or metal containers in proximity to the iodine.

### Section 11 — Toxicological Information

Acute effects: Highly toxic, harmful vapor, corrosive, severe  
lachrymatol, sensitizer, stomach pains, vomiting.

Chronic effects: Dermatitis

Target organs: Thyroid

ORL-HUM LD50: 2-4 gm for an adult

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 #12a is one option.

### Section 14 — Transport Information

Shipping Name: Toxic solid, inorganic, n.o.s.

Hazard Class: 6.1 Keep away from food

UN Number: UN3288

N/A = Not applicable

### Section 15 — Regulatory Information

TSCA-listed, EINECS-listed (231-442-4), RCRA code D002.

### 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 Is No. 1 in Safety*

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