



SDS #: 407

Revision Date: April 1, 2016

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Iodine Safety Data Sheet (SDS)

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Iodine

Signal Word
WARNING

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

Chemtrec Emergency Phone Number: (800) 424-9869

Pictograms

SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Acute toxicity, dermal and inhalation (Category 4). Harmful if inhaled or in contact with skin (H312+H332).



SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Iodine	7553-56-2	I ₂	253.81	

SECTION 4 — FIRST AID MEASURES

Immediately call a POISON CENTER or physician (P310).

If inhaled: Remove victim to fresh air in a position comfortable for breathing (P304+P340).

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing (P305+P351+P338). If on skin: Immediately remove all contaminated clothing. Rinse skin with water (P303+P361+P353). Wash contaminated clothing before reuse (P363).

If swallowed: Rinse mouth. Do NOT induce vomiting (P301+P330+P331).

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable, noncombustible solid.

When heated to decomposition, may emit toxic fumes.

In case of fire: Use a tri-class dry chemical fire extinguisher.

NFPA Code

H:2

F:0

R: 2

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Ventilate area. Sweep up the spill, place in a sealed bag or container, and dispose. Wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Inorganic #2. Store with acetates, halides, sulfates, sulfites, thiosulfates and phosphates. Sublimes. Store in a Flinn Chem-Saf™ bag. Store in a cool, dry place. Frequently oxidizes metal shelves or metal containers in proximity to the iodine. Use only in a hood or well-ventilated area (P271). Do not breathe dust or fumes (P260).

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling (P264). Use only in a hood or well-ventilated area (P271).

Exposure guidelines: Ceiling 0.1 ppm (OSHA); TLV 0.01 ppm (inhalable fraction and vapor) (ACGIH) REL-Ceiling 0.1 ppm (NIOSH)

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Gray-black flakes with a metallic luster. Characteristic odor.
Soluble: Alcohol and other organic solvents. Insoluble in water.

Boiling point: 184.4 °C

Melting point: 113.5 °C

Specific gravity: 4.93

Vapor pressure: 0.3 mm Hg

Vapor density: 8.8

SECTION 10 — STABILITY AND REACTIVITY

Shelf life: Fair, sublimes. See Section 7 for further information.

Incompatible materials: Reacts violently with metal powders, antimony, ammonia, acetaldehyde and acetylene. This generates fire and explosion hazard. Corrodes steel.

SECTION 11 — TOXICOLOGICAL INFORMATION

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

Chronic effects: Dermatitis.

Target organs: Thyroid.

ORL-HUM LD₅₀: 28 mg/kg

IHL-RAT LC₅₀: N.A.

SKN-RBT LD₅₀: N.A.

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 #12a is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Iodine. UN number: UN3495 Hazard class: 8 (6.1)

SECTION 15 — REGULATORY INFORMATION

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

SECTION 16 — OTHER INFORMATION

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

N/A = Not applicable

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

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