SDS #: 407
Revision Date: April 1, 2016

Iodine Safety Data Sheet (SDS)

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Signal Word
WARNING

Iodine

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 LD_{50}: 28 mg/kg
IHL-RAT LC_{50}: N.A.
SKN-RBT LD_{50}: 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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FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

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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