

effects exposure	<p>IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth.</p> <p>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>IF ON SKIN: Remove immediately all contaminated clothing and rinse skin with water/shower. Then wash skin with plenty of soap and water. If skin irritation occurs, get medical advice/attention.</p> <p>Immediately call a POISON CENTER or doctor/physician. Call a POISON CENTER or doctor/physician if you feel unwell. Protect from sunlight. Store in a cool, dry and well-ventilated place. Keep container tightly closed.</p> <p>Store locked up.</p> <p>Dispose of contents/ container in accordance with local/national regulations.</p>
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Section 3. Composition / information on ingredients

Chemical or common name:	Iodine
Chemical formula:	I ₂
Single Substance or Compound:	Single substance
Composition:	100%
CAS #:	7553-56-2
RTECS#:	NN1575000
TSCA inventory :	Listed
EINECS:	2314424

Section 4. First aid measures

Eye contact:	Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention.
Skin contact:	Promptly flush contaminated skin with soap or mild detergent and water. Contact physician if irritation continues.
Inhalation:	Remove the exposed person immediately and provide fresh air. Get medical attention.
Ingestion:	Rinse mouth and throat with water. Get medical attention immediately.

Section5. Fire fighting measures

Extinguishing media:	Water fog or foam, Perlite ,dry sand. Do not use carbon dioxide or dry chemicals.
Fire fighting:	The product is not combustible but enhances combustion of other substances. Self-contained breathing apparatus and full protective clothing should be used, if the material is involved in fire.

Section 6. Accidental release measures

Personal Precautions:	Workers should use protective wears to prevent contact with the spilt adhesive and inhalation of its vapor/dusts.
Environmental hazard precautions:	Shut off leak if without risk. Prevent flow out to river, etc. so as not to badly affect.
Method for containment and cleaning up:	Remove combustible materials and all sources of ignition. Indoor leakage: Ventilate as much as possible until the cleaning is completed.



Outdoor leakage: Work from the windward and evacuate the leeward crowd.
Gather up, pack in closed DOT-approved waste container as much as possible.
Carefully collect remnant and move to a safe place.

Section 7. Handling and storage

Precautions to be taken in handling:

Safe handling: Use protective wears and local ventilation equipment, if inhalation or skin contact is foreseen.

Avoid prolonged or repeated exposure.

Precautions to be taken in storage:

General precautions: Store the material in a sealed container.

Store in a cool, dry, well ventilated and dark place away from incompatible materials.

Keep away from any heat, light.

Section 8. Exposure controls / personal protection

Exposure guideline:	ACGIH(2024)		OSHA(2006)	
	Chemical Name	TLV-TWA	TLV-STEL	PEL-TWA
		ppm	ppm	ppm mg/m ³
Iodine	0.001(IFV)	—	0.1(C)	1(C)

IFV : Inhalable fraction and vapor, C : Ceiling limit

Facility measures: Local ventilation of closed work room or total proper ventilation to prevent inhalation.

Protective ware: Wear appropriate NIOSH/MSHA-approved respirator, safety goggles, impervious gloves, protective wear, protective boots etc.

Section 9. Physical and chemical properties

Appearance: Blackish-purple solid, metallic luster

Chemical formula: I₂

Formula weight: 253.8

Melting point: 113.7 °C

Boiling point: 184.4 °C

Density: 4.93 g/cm³

Solubility: Slightly soluble; water(0.03 g/100mlH₂O(20°C))
Soluble; benzene, ethanol, ether, carbon tetrachloride, chloroform

Flammable: Non-combustible substance

Oxidation: Oxidizing substance

Section10. Stability and reactivity

Stability: Stable in a (sealed) dry atmosphere under room temperature.

Reactivity: Sublimable substance

Incompatibility: Flammable substance, reducing agent, alkali metal, phosphorus, antimony, ammonia, acetaldehyde, acetylene

Condition to avoid: Heat, light

Section11. Toxicological information

Acute toxicity(Oral): GHS : Category 4 ; Harmful if swallowed

Oral rat LD₅₀ = 315 mg/kg (EPA Pesticide(2006))

Acute toxicity(Dermal): GHS : Not classified.; Falls below the lowest level.

Dermal rat LD₅₀ = 3333 mg/kg (EPA Pesticide(2006))

Acute toxicity(Inhalation; vapours): GHS : Category 1 ; Fatal if inhaled

Inhalation; vapours rat LC₅₀(4h) = 35 ppm (EPA Pesticide(2006))

Skin corrosive / irritation: GHS : Category 2 ; Causes skin irritation



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Serious eye damage / irritation: GHS : Category 2 ; Causes serious eye irritation
 Respiratory sensitization: GHS : No data available
 Skin sensitization: GHS : Category 1 ; May cause an allergy skin reaction
 Germ cell mutagenicity: GHS : No data available
 Carcinogenicity: GHS : No data available

Carcinogenicity:

Chemical Name	ACGIH (2024)	IARC (2024)	NTP (2021)
Iodine	A4	—	—

ACGIH A4 Not classifiable as a human carcinogen.

Reproductive toxicity: GHS : No data available
 Specific target organ toxicity
 – single exposure: GHS : Category 3 ; May cause respiratory irritation
 – repeated exposure: GHS :
 Category 1 ; Causes damage to organs through prolonged or repeated exposure(thyroid)
 Aspiration hazard: GHS : No data available

Section12. Ecological information

Ecotoxicity:

Hazardous to the aquatic environment

– acute toxicity: GHS : Category 1 ; Very toxic to aquatic life
 Crustacea(Daphnia magna) $EC_{50}(48h) = 0.16 \text{ mg/L}$
 (ECETOC TR91(2003))

– chronic toxicity: GHS :
 Category 1 ; Very toxic to aquatic life with long lasting effects exposure

Hazardous to the ozone layer GHS : No data available
 No Freon or Halon

Fish toxicity: See above

Degradability: No data available

Bioaccumulative potential: No data available

Mobility in soil: No data available

Section13. Disposal considerations

Disposal method: User of the product should contract with the local government or licensed 'Industrial Waste Haulers' for disposal of waste.

Section 14. Transport information

UN number: 3495
 IATA shipping name: IODINE
 IATA hazard class: Class 8 (Corrosive substances)
 Subsidiary risk: 6.1
 IATA packing group: III
 HS code: 2801.20
 Marine pollution: None
 Precautions: Container should be transported in a secure position, in a well-ventilated vehicle.

Section 15. Regulatory information

TSCA inventory: Listed

Please refer to any other local / national measures that may be relevant.



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Section 16. Other information

This SDS is only for provision of information, and it does not represent a guarantee the properties or safeties of the product.

The information herein is based on the references we could obtained and the present state of our knowledge, however, this SDS does not always cover all information about the product. Some new information or amendments may be added afterwards.

Prior to use, please investigate the laws and regulations of the organization, area and country where the product is to be used. The information is intended to ordinary usage, in case of special handling, sufficient care should be taken.

