

Material Safety Data Sheet / Safety Data sheet

Iodine Crystals

Section 1: Chemical Product Identifier and Synonyms

Product Name: Iodine Crystals

UN Number: 3495

CAS Number: 7553-56-2

Chemical Formula: I₂

Section 2: Composition and Information on Ingredients

Composition

Name	CAS Number:	% By Weight
Iodine Crystals	7553-56-2	99.9%

Toxicology Data On Ingredients: Iodine Crystals LD50: Not Available. LC50: Not Available

Section 3: Hazards Identification

Potential Acute Health Effects:

May be corrosive to metals.

Harmful if swallowed.

Harmful in contact with skin.

Causes skin irritation.

Causes serious eye irritation.

Harmful if inhaled.

May cause respiratory irritation.

May cause drowsiness or dizziness.

Causes damage to organs through prolonged or repeated exposure.

Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available.

Section 4: First Aid Measures

Eye Contact:

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

Skin Contact:

Wash off immediately with plenty of water for at least 15 minutes. Obtain medical attention.

Inhalation:

Move to fresh air. If breathing is difficult, give oxygen. Obtain medical attention.

Ingestion:

Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.

Section 5: Fire and Explosion Data

Flammability of the Product: Not available.

Auto-Ignition Temperature: Not available.

Flash Points: Not applicable.

Flammable Limits: Not applicable.

Products of Combustion: Not available.

Fire Hazards in Presence of Various Substances: Not applicable.

Explosion Hazards in Presence of Various Substances: Not available.

Risks of explosion of the product in presence of mechanical impact: Not available.

Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Not available.

Section 6: Accidental Release Measures**Small Spill:**

Use personal protective equipment. Ensure adequate ventilation. Avoid contact with skin, eyes and inhalation of vapors. Do not breathe dust/fume/gas/mist/vapors/spray.

Large Spill:

Sweep up or vacuum up spillage and collect in suitable container for disposal. Keep in suitable, closed containers for disposal.

Section 7: Handling and Storage

Precautions:

Wear personal protective equipment. Ensure adequate ventilation. Avoid dust formation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation.

Storage:

Keep containers tightly closed in a dry, cool and well-ventilated place. Do not store in metal containers. Keep at temperatures below 25°C.

Section 8: Exposure Controls / Personal Protection

Engineering Controls:

Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal Protection:

Safety glasses. Gloves. Protective clothing. Dust production: dust mask with filter.

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:

Consult local authorities for acceptable exposure limits.

Section 9: Physical and Chemical Properties

Physical state and appearance: Crystalline Spheres / Prills

Odour: Pungent.

Taste: Not available.

Molecular Weight: 253.81 g/mole

Colour: Lustrous Metallic Magenta

pH (1% soln/water): 5.1 saturated solution

Boiling Point: 185 °C / 365 °F @ 760 mmHg

Melting Point: 113 °C / 235.4 °F

Critical Temperature: Not available.

Specific Gravity: Not available. (Water = 1)

Vapour Pressure: 0.41 hPa @ 25 °C

Vapour Density: 8.8

Volatility: Not available.

Odour Threshold: Not available.

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Not available.

Dispersion Properties: Not available.

Solubility: slightly soluble.

Section 10: Stability and Reactivity Data

Stability: Stable under normal conditions.

Instability Temperature: Not available.

Conditions of Instability: Avoid dust formation. Incompatible products. Excess heat.

Incompatibility with various substances: Strong oxidizing agents, Powdered metals, Ammonia, Alcohols, Copper.

Special Remarks on Reactivity: Not available.

Special Remarks on Corrosivity: Not available.

Polymerization: Does not occur.

Section 11: Toxicological Information

Routes of Entry: Eye contact. Inhalation. Ingestion.

Toxicity to Animals: (LD50): 315 mg/kg (Rat) LC50: 4.588 mg/L 4h (Rat)

Chronic Effects on Humans: Not available.

Other Toxic Effects on Humans: Not available.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans: Not available.

Section 12: Ecological Information

Ecotoxicity: Very toxic to aquatic organisms. The product contains following substances which are hazardous for the environment.

BOD5 and COD: Not available.

Products of Biodegradation: Not available.

Toxicity of the Products of Biodegradation: Not available.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Information

Waste Disposal: Dispose of in accordance with local regulations

Section 14: Transport Information

DOT Classification: Class:6.1

Identification: Iodine UN Number:3495 PG: III

Special Provisions for Transport: Not available.

Section 15: Regulatory Information

Regulations: Labelling according to Regulation (EC) No 1272/2008.

Section 16: Other Information

The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials. The author will not be held liable for any damage or injury caused by this product and does not obviate the requirement for end users to carry out their own workplace and specific use risk assessment.

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