SDS

永华化学股份有限公司
YONGHUA CHEMICAL CO., LTD.

Iodine

1. Product Identification

Synonyms: no

CAS No.: 7553-56-2

Manufacturer/supplier:

Yonghua Chemical Co., Ltd.

Address: Xiangqiao Village, Zhitang(Heshi)Town, Changshu City 215500,

Jiangsu Province, China

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2. Composition/Information on Ingredients

CAS No.	Chemical Name	Content	EINECS#
7553-56-2	Iodine	≤100	231-442-4

Hazard Symbols: XN N

Risk Phrases: 20/21 50

3. Hazards Identification

EMERGENCY OVERVIEW

Harmful by inhalation and in contact with skin. Very toxic to aquatic organisms.Corrosive.

Potential Health Effects

Eye:

Causes severe eye irritation. May cause eye burns. Vapor or mist may cause irritation and severe burns.

Skin:

Causes skin burns. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material.

Ingestion:

May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause kidney damage. May cause burns to the digestive tract. May cause thyroid abnormalities.

Inhalation:

May cause irritation of the respiratory tract with burning pain in the nose and throat, coughing, wheezing, shortness of breath

and pulmonary edema. May cause epiphoria, which is an excessive flow of tears.

Chronic:

Chronic exposure can lead to iodism characterized by salivation, nasal discharge, sneezing, conjunctivitis, fever, laryngitis, bronchitis, stomatitis, and skin rashes. Chronic exposure can affect thyroid function. May cause kidney damage.

4. First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin:

Get medical aid immediately. Rinse area with large amounts of water for at least 15 minutes. Remove contaminated clothing and shoes.

Ingestion:

Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

Inhalation:

Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Do NOT use mouth-to-mouth resuscitation.

Notes to Physician:

5. Fire Fighting Measures

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Material will not burn. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool.

Containers may explode when heated.

Extinguishing Media:

Use extinguishing media most appropriate for the surrounding fire.

6. Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Vacuum or sweep up material and place into a suitable disposal container. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions.

Provide ventilation.

7. Handling and Storage

Handling:

Wash thoroughly after handling. Use with adequate ventilation.

Minimize dust generation and accumulation. Keep container tightly closed. Avoid contact with clothing and other combustible materials.

Do not get on skin or in eyes. Do not ingest or inhale.

Storage:

Do not store near combustible materials. Keep away from food and drinking water. Keep away from strong acids. Keep away from metals.

Keep away from reducing agents.

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8. Exposure Controls/Personal Protection

Engineering Controls:

Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Exposure Limits CAS# 7553-56-2: United Kingdom, WEL - STEL: 0.1 ppm STEL; 1.1 mg/m3 STEL United States OSHA: ; 0.1 ppm Ceiling; 1 mg/m3 Ceiling Belgium - TWA: 0.1 ppm VLE; 1 mg/m3 VLE France - VLE: 0.1 ppm VLE; 1 mg/m3 VLE Germany: 0.1 ppm TWA; 1.1 mg/m3 TWA Germany: Skin absorber Japan: 0.1 ppm OEL; 1 mg/m3 OEL Malaysia: 0.1 ppm Ceiling; 1.0 mg/m3 Ceiling Russia: 1 mg/m3 TWA Spain: 0.1 ppm VLA-EC; 1 mg/m3 VLA-EC Personal Protective Equipment Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:

Wear impervious gloves.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

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9. Physical and Chemical Properties

Physical State: Solid

Color: black-violet

Odor: iodine-like

pH: 5.4 (sat soln)

Vapor Pressure: 1 mm Hg @ 38.7

Viscosity: Not available.

Boiling Point: 184.35 deg C

Freezing/Melting Point: 113.5 deg C

Autoignition Temperature: Not applicable.

Flash Point: Not applicable.

Explosion Limits, lower: Not available.

Explosion Limits, upper: Not available.

Decomposition Temperature: Sublimes

Solubility in water: Slightly soluble.

Specific Gravity/Density: 4.93

Molecular Formula: I2

Molecular Weight: 253.81

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10. Stability and Reactivity

Chemical Stability:

Stable.

Conditions to Avoid:

Dust generation, excess heat.

Incompatibilities with Other Materials:

Powdered aluminum, active metals. Acetylene, acetaldehyde cause explosive reactions. Iodine reacts with ammonium hydroxide to form shock sensitive compounds that are explosive when dry.

Hazardous Decomposition Products:

Hydrogen iodide.

Hazardous Polymerization: Will not occur.

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11. Toxicological Information

RTECS#:

CAS# 7553-56-2: NN1575000 LD50/LC50:

CAS# 7553-56-2: Oral, mouse: LD50 = 22 gm/kg; Oral, mouse: LD50 = 1000 mg/kg; Oral, rabbit: LD50 = 10 gm/kg; Oral, rat: LD50 = 14 gm/kg.

Carcinogenicity:

Iodine - Not listed by ACGIH, IARC, or NTP.

Other:

See actual entry in RTECS for complete information.

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12. Ecological Information

Ecotoxicity:

Fish, LC50: 28.5 mg/kg

13. Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

14. Transport Information

IATA

Shipping Name: IODINE

Hazard Class: 8(6.1)

UN Number: 3495

Packing Group: III

IMO

Shipping Name: IODINE

Hazard Class: 8(6.1)

UN Number: 3495

Packing Group: III

RID/ADR

Shipping Name: IODINE

Hazard Class: 8(6.1)

UN Number: 3495

Packing Group: III

15.Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XN N

Risk Phrases:

R 20/21 Harmful by inhalation and in contact with skin.

R 50 Very toxic to aquatic organisms.

Safety Phrases:

S 23 Do not inhale gas/fumes/vapour/spray.

S 25 Avoid contact with eyes.

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S 61 Avoid release to the environment. Refer to special instructions/safety data sheets.

WGK (Water Danger/Protection)

CAS# 7553-56-2: 1

Canada

CAS# 7553-56-2 is listed on Canada's DSL List.

CAS# 7553-56-2 is listed on Canada's Ingredient Disclosure List.

US FEDERAL

TSCA

CAS# 7553-56-2 is listed on the TSCA inventory.

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16. Other Information

Yonghua Chemical Co., Ltd. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

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