

## Iodine 7553-56-2 MSDS

### Section 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE

#### Product identifiers

Product name : Iodine solution

#### Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

### Section 2. HAZARDS IDENTIFICATION

#### Classification of the substance or mixture

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

Not a hazardous substance or mixture according to EC-directives 67/548/EEC or 1999/45/EC.

#### Label elements

#### Labelling according Regulation (EC) No 1272/2008 [CLP]

Pictogram none

Signal word none

Hazard statement(s) none

Precautionary statement(s) none

Supplemental Hazard none

Statements

Safety data sheet available on request.

Safety data sheet available on request for professional users.

**Other hazards - none**

### Section 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Mixtures

Formula : I<sub>2</sub>

Molecular Weight : 253,81 g/mol

Component	Classification	Concentration
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#### Iodine

CAS-No.	7553-56-2	Acute Tox. 4; Aquatic Acute 1; < 10 %
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EC-No.	231-442-4	
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H400, H312, H332

Index-No.	053-001-00-3	
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Xn, N, R20/21 - R50

#### Potassium iodide

CAS-No.	7681-11-0	Acute Tox. 4; Skin Irrit. 2; Eye < 10 %
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EC-No.	231-659-4	Irrit. 2; H302, H315, H319
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Xn, R22 - R36/38

For the full text of the H-Statements and R-Phrases mentioned in this Section, see Section 16

### Section 4. FIRST AID MEASURES

#### Description of first aid measures

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

**If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**

Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed**

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**Most important symptoms and effects, both acute and delayed**

burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Prolonged exposure to

iodides may produce iodism in sensitive individuals. Symptoms of exposure include: skin rash, running

nose, headache and irritation of the mucous membrane. For severe cases the skin may show pimples,

boils, hives, blisters and black and blue spots. Iodides are readily diffused across the placenta. Neonatal

deaths from respiratory distress secondary to goiter have been reported. Iodides have been known to

cause drug-induced fevers, which are usually of short duration.

**Indication of any immediate medical attention and special treatment needed**

no data available

**Section 5. FIREFIGHTING MEASURES**

**Extinguishing media**

**Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special hazards arising from the substance or mixture**

Hydrogen iodide, Potassium oxides

**Advice for firefighters**

Wear self contained breathing apparatus for fire fighting if necessary.

**Further information**

no data available

**Section 6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

Evacuate personnel to safe areas.

**Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into

the

environment must be avoided.

#### **Methods and materials for containment and cleaning up**

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

#### **Reference to other sections**

For disposal see section 13.

### **Section 7. HANDLING AND STORAGE**

#### **Precautions for safe handling**

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

#### **Conditions for safe storage, including any incompatibilities**

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are

opened must be carefully resealed and kept upright to prevent leakage.

#### **Specific end use(s)**

no data available

### **Section 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### **Control parameters**

#### **Components with workplace control parameters**

#### **Exposure controls**

#### **Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and

at the end of workday.

#### **Personal protective equipment**

#### **Eye/face protection**

Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### **Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

#### **Body Protection**

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### **Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup

to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air

respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

## **Section 9. PHYSICAL AND CHEMICAL PROPERTIES**

### **Information on basic physical and chemical properties**

- a) Appearance      Form: liquid
- b) Odour      no data available
- c) Odour Threshold      no data available
- d) pH      no data available
- e) Melting point/freezing      no data available  
point
- f) Initial boiling point and no data available  
boiling range
- g) Flash point      no data available
- h) Evaporation rate      no data available
- i) Flammability (solid, gas) no data available
- j) Upper/lower      no data available  
flammability or  
explosive limits
- k) Vapour pressure      no data available
- l) Vapour density      no data available
- m) Relative density      no data available
- n) Water solubility      no data available
- o) Partition coefficient: n- no data available  
octanol/water
- p) Auto-ignition      no data available  
temperature
- q) Decomposition      no data available  
temperature
- r) Viscosity      no data available
- s) Explosive properties      no data available
- t) Oxidizing properties      no data available

### **Other safety information**

no data available

## **Section 10. STABILITY AND REACTIVITY**

### **Reactivity**

no data available

### **Chemical stability**

no data available

### **Possibility of hazardous reactions**

no data available

**Conditions to avoid**

no data available

**Incompatible materials**

no data available

**Hazardous decomposition products**

Other decomposition products - no data available

**Section 11. TOXICOLOGICAL INFORMATION****Information on toxicological effects****Acute toxicity**

no data available

**Skin corrosion/irritation**

no data available

**Serious eye damage/eye irritation**

no data available

**Respiratory or skin sensitization**

no data available

**Germ cell mutagenicity**

no data available

**Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC.

**Reproductive toxicity**

no data available

**Specific target organ toxicity - single exposure**

no data available

**Specific target organ toxicity - repeated exposure**

no data available

**Aspiration hazard**

no data available

**Potential health effects****Inhalation**

May be harmful if inhaled. Causes respiratory tract irritation.

**Ingestion** May be harmful if swallowed.

**Skin** May be harmful if absorbed through skin. Causes skin irritation.

**Eyes** Causes eye burns.

**Signs and Symptoms of Exposure**

burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Prolonged exposure to

iodides may produce iodism in sensitive individuals. Symptoms of exposure include: skin rash, running

nose, headache and irritation of the mucous membrane. For severe cases the skin may show pimples,

boils, hives, blisters and black and blue spots. Iodides are readily diffused across the placenta.  
Neonatal  
deaths from respiratory distress secondary to goiter have been reported. Iodides have been known to  
cause drug-induced fevers, which are usually of short duration.

**Additional Information**

RTECS: Not available

**Section 12. ECOLOGICAL INFORMATION**

**Toxicity**

no data available

**Persistence and degradability**

no data available

**Bioaccumulative potential**

no data available

**Mobility in soil**

no data available

**Results of PBT and vPvB assessment**

no data available

**Other adverse effects**

Toxic to aquatic life.

**Section 13. DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

**Product**

Offer surplus and non-recyclable solutions to a licensed disposal company.

**Contaminated packaging**

Dispose of as unused product.

**Section 14. TRANSPORT INFORMATION**

**UN number**

ADR/RID: -    IMDG: -    IATA: -

**UN proper shipping name**

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA:        Not dangerous goods

**Transport hazard class(es)**

ADR/RID: -    IMDG: -    IATA: -

**Packaging group**

ADR/RID: -    IMDG: -    IATA: -

**Environmental hazards**

ADR/RID: no    IMDG Marine Pollutant: no    IATA: no

**Special precautions for user**

no data available

**SECTION 15 - REGULATORY INFORMATION**

N/A

**SECTION 16 - ADDITIONAL INFORMATION**

N/A