Scientific Laboratory Supplies - Safety Data Sheet CHE2238

(in accordance with regulation (EU) 2015/830 and regulation (EC) 1272/2008)

Revision: 2.0
(Replaces revision 1.1 of 16 April 2021)

Revision date: 31 January 2022
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Section 1. Identification

1.1 Product Identifier CHE2238

Product Name IODINE A.R. 250g.

CAS Number 7553-56-2

REACH Registration No A registration number is not available as the substance or its uses are exempt, the annual tonnage does not require a registration or the registration is envisaged for a later date.

Molecular Formula I_2 =253.81

1.2 Relevent identified uses of the substance or mixure & uses advised against

Uses of Material Chemical for industrial and laboratory use. Not suitable for domestic use.

1.3 Supplier Scientific Laboratory Supplies

Unit 6, Foresters Avenue
Fairham Business Park
Fairham
Nottingham
NG11 2AF
UNITED KINGDOM

Phone 0115 9821111
Fax 0115 9825275
Email sales@scientific-labs.com

1.4 Emergency Telephone (08:00-17:00) 0115 9821111
(24hr) 112
(Have this document to hand)

Section 2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to regulation 1272/2008/EC

Acute toxicity, category 4 (dermal)	H312: Harmful in contact with skin.
Acute toxicity, category 4 (inhalation)	H332: Harmful if inhaled.
Spec target organ tox - single, category 3	H335: May cause respiratory irritation.
Spec target organ tox - repeat, category 1	H372: Causes damage to organs through prolonged or repeated exposure.
Hazard to aquatic environment, category 1	H400: Very toxic to aquatic life.

2.2 Label elements

Labelling according to regulation 1272/2008/EC

Signal word Danger

Hazard Pictograms

Hazard Statements	Harmful if inhaled. Harmful in contact with skin. May cause respiratory irritation. Causes damage to organs through prolonged or repeated exposure. Very toxic to aquatic life.
Precautionary Statements	Wear protective gloves / protective clothing / eye protection / face protection. Avoid breathing dust / fume / gas / mist / vapours / spray. Use only outdoors or in a well-ventilated area. Wash contaminated clothing before reuse. IF ON SKIN: Wash with plenty of soap and water. Avoid release to the environment.

Section 3. Composition

3.1 Substances

Component	CAS No.	EEC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Iodine	7553-56-2	231-442-4		>99%	Acute Tox. 4 (D),Acute Tox. 4 (I),STOT SE 3 (I),STOT RE 1,Aquatic Acute 1

Section 4. First Aid

4.1 Description of first aid measures

Eyes	Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. OBTAIN MEDICAL ATTENTION URGENTLY.
Skin	Wash contaminated area with sodium thiosulphate solution. Remove contaminated clothing immediately and wash before re-use. If discomfort persists OBTAIN MEDICAL ATTENTION.
Inhalation	Remove from exposure. Keep warm and at rest. If there is difficulty in breathing give oxygen if available. If breathing stops or shows signs of failing, apply artificial resuscitation. OBTAIN MEDICAL ATTENTION URGENTLY.
Ingestion	If conscious give several glasses of a 5% sodium thiosulphate solution to drink then administer a salt containing purgative to induce vomiting. OBTAIN MEDICAL ATTENTION URGENTLY.
Personal protection for first aiders	Wear protective gloves / eye protection.

4.2 Most important symptoms and effects, both acute & delayed.

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed.

No further relevant information available.

Section 5. Fire Fighting

5.1 Extinguishing media

Extinguishing Media	Consider what other flammable materials are present and act accordingly.
Unsuitable Media	Nothing specified.

5.2 Special hazards arising from the substance or mixture

Hazards	May evolve toxic fumes if involved in a fire.

5.3 Advice for firefighters

Advice for firefighters	Evacuate area immediately. Keep up wind. Avoid exposure to toxic vapours and fumes. Fire-fighters should wear protective clothing and breathing apparatus.

Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Protection	Avoid breathing vapour. Only re-enter area with full protective clothing and breathing apparatus. Do not allow other people to enter area. Do not allow general use of area until it is safe to do so.

6.2 Environmental precautions

Enviromental	Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs.

6.3 Methods and material for containment and cleaning up

Major Spillage	Shovel/sweep up into container for removal Wash area down with sodium thiosulphate solution and copious amounts of water.
Minor Spillage	Shovel/sweep up into container for removal Wash area down with sodium thiosulphate solution and copious amounts of water.

6.4 Reference to other sections

See section 8.2 for information on protective equipment and section 13 for information on disposal.

Section 7. Storage & Handling

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Do not breath vapours. Do not allow to contaminate clothing.

Ensure Local Exhaust Ventilation maintains vapour concentrations below the recommended limits.

7.2 Conditions for safe storage, including any incompatibilities

Well ventilated, cool, dry storage . Keep well separated from food and food containers.

7.3 Specific end use(s)

See section 1.2.

Section 8. Workplace Exposure & Personal Protection

8.1 Control parameters

Component	CAS No	Concentration	Workplace Exposure Limits			
			Long Term (8hr TWA)		Short Term 15min period)	
Iodine	7553-56-2	>99%	-	-	0.1 ppm	1.0 mg/m-3

Exposure data source(s)	IOELV: Indicative Occupational Exposure Limit Value.

8.2 Exposure controls

Respiratory Protection	Use L.E.V. or natural ventilation to maintain vapour concentrations below exposure limits. If not, use a well maintained chemical cartridge organic vapour respirator, or use self contained breathing apparatus.
Hand Protection	Wear gloves.
Eye Protection	Use tightly fitting chemical splash proof glasses or goggles.
Skin Protection	Avoid contact with skin. If skin contact or contamination of clothing is likely, protective clothing must be worn.
Special Hazards	No special precautions required.

Section 9. Physical & Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance	Bluish-black prills which evolve a violet corrosive vapour.
Odour	Pungent and intensely irritating.
pH	Not applicable
Boiling Point	184.3°C
Melting Point	113°C
Flash Point	Not applicable
Upper Flammable Limit	Not applicable
Lower Flammable Limit	Not applicable
Auto Ignition	Not applicable

Explosive Properties	No.
Oxidising Properties	No.
Vapour Pressure	Not applicable
Relative Density	4.9300
Water Solubility	Sparingly soluble in water.

9.2 Other information

No data available.

Section 10. Stability & Reactivity

10.1	Reactivity	No data available.
10.2	Chemical Stability	Stable under normal conditions
10.3	Possibility of hazardous reactions	No data available.
10.4	Conditions to Avoid	Prolonged heat.
10.5	Incompatable Materials	Forms highly explosive compounds with ammonia which are shock sensitive. Reacts violently with reducing materials, sulphur, iron, alkali metals and phosphorous. Moisture ignites mixtures with aluminium, magnesium and zinc powders.
10.6	Hazardous Decomposition Products	Decomposes to evolve toxic and corrosive iodine vapour.

Section 11. Toxicological Information

11.1 Information on toxicological effects

Eyes	The vapour is irritating to the eyes.
Skin	Stains skin. Intensely irritating to the skin causing redness, pain and burns. Skin absorbtion may be an important exposure route producing toxic effects similar to inhalation.
LD50 Skin	1425mg/kg Rat
Ingestion	Ingestion of large amounts will cause abdominal pain, nausea, vomiting and diarrhoea. Purging, excessive thirst and circulatory failure may develop in severe cases.
LD50 Oral	14000mg/kg Rat
Inhalation	Exposure to vapour concentrations above the occupational exposure limits will produce severe irritation of the eyes, nose, throat and respiratory tract. Symptoms include sore throat, cough and laboured breathing.
LD50 Inhalation	>4.588mg/l Rat (4 hours)
TCLo	Not available
Carcinogenicity	Not considered to be a carcinogen.
Mutagenicity	Not considered to be a mutagen.
Reproductive Effects	None identified.

Section 12. Ecological

12.1	Toxicity	Very toxic to aquatic organisms.
	LC50 Algal	0.13mg/l Green algae
	LC50 Crustacea	0.2mg/l Daphnia magna (48 hours)
	LC50 Fish	1.7mg/l Rainbow trout (96 hours)
12.2	Persistence and degradability	No data available.
12.3	Bioaccumulative potential	No data available.
12.4	Mobility in soil	No data available.
12.5	Results of PBT & vPvB assessment	Assessment not required.
12.6	Other adverse effects	None known at present.

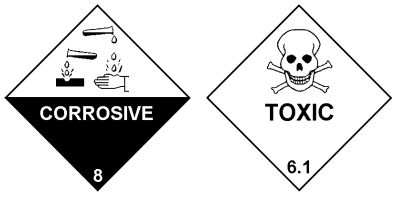
Section 13. Disposal Considerations

13.1 Waste treatment methods

Disposal Methods	Dissolve in an excess of water and treat with sodium thiosulphate solution until the purple colour disappears. Wash to drain with copious amounts of water.
Contaminated Packaging	Wash out containers with water. Use a licensed waste disposer.

Section 14. Transport Information

14.1	**UN Number**	3495
14.2	**Proper Shipping Name**	Iodine
14.3	**Transport classes**	
	UN classification	8
	Subsidiary hazard(s)	6.1
	Transport category	3
	ADR Hazard ID	86
	Tunnel Restriction Code	E
14.4	**Packing Group**	III
14.5	**Environment hazards**	See section 12.
14.6	**Special precautions for user**	No special precautions required.
14.7	**Transport in bulk**	Not transported in bulk.



Section 15. Regulatory Information

15.1 Safety, health and environment regulations specific for subtance/mixture.

Classification, Labeling & Packaging of Substances & Mixtures Regulations (1272/2008/CE)

Classification	Acute toxicity, category 4 (dermal); Acute toxicity, category 4 (inhalation); Spec target organ tox - single, category 3; Spec target organ tox - repeat, category 1; Hazard to aquatic environment, category 1
Signal word	Danger
Hazard Pictograms	
Hazard Statements	H332, H312, H335, H372, H400 Harmful if inhaled. Harmful in contact with skin. May cause respiratory irritation. Causes damage to organs through prolonged or repeated exposure. Very toxic to aquatic life.
Precautionary Statements	P280, P261, P271, P363, P302+P352, P273 Wear protective gloves / protective clothing / eye protection / face protection. Avoid breathing dust / fume / gas / mist / vapours / spray. Use only outdoors or in a well-ventilated area. Wash contaminated clothing before reuse. IF ON SKIN: Wash with plenty of soap and water. Avoid release to the environment.

15.2 Chemical safety assessment

Assessment not required.

Section 16. Other Information

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. See sections 11 for toxicological information and section 12 for ecological information.

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