

SAFETY DATA SHEET

IODINE AR

1. Identification of the substance/preparation and of the company or firm

1.1 Identification of the substance or preparation:

Catalogue no. : KA267

Product name : Iodine AR

1.2 Use of the substance/preparation:

For laboratory utilisation, analysis, research and fine chemistry.

1.3 Identification of the company or firm:

Elago Enterprises Pty Ltd, 5 The Cloisters, Cherrybrook, N.S.W. 2126, Australia

Tel no. (61) 2 98998169

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1.4 Emergency telephone:

(61) 2 98998169 (9:00am - 5:00 pm) [Office hours]

2. Identification of dangers

2.1 Classification of the substance.

Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)

Acute toxicity, Dermal, Category 4: Harmful in contact with skin or if inhaled.

Acute toxicity, Inhalation, Category 4: Harmful if inhaled.

Acute toxicity to the aquatic environment, Category 1: Very toxic to aquatic life.

2.2 Label elements.

Hazard pictograms



Signal words : Warning.

Hazard statements (H) :

H312+H332 : Harmful in contact with skin or if inhaled.

H400 : Very toxic to aquatic life.

Precautionary statements (P) :

P273 : Avoid release to the environment.

P280 : Wear protective gloves/protective clothing/eye protection/face protection

P312 : Call a POISON CENTER/doctor if you feel unwell.

P321 : Specific treatment (show this label).

P302+P352 : IF ON SKIN: Wash with plenty of water.

P304+P340 : IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P362+P364 : Take off contaminated clothing and wash it before reuse.

2.3 Other hazards.

None known.

3. Composition/information on ingredients

Substance / Preparation.

Iodine

Formular: I₂

CAS No : 7553-56-2

Molecular weight : 253.81

Contains no other components or impurities which will influence the classification of the product.

Mixture.

Not applicable.

4. First-aid measures

4.1 Description of first aid measures.

Inhaling: Take the person out into the fresh air. If unconscious, place them in a suitable position and seek medical assistance.

Skin contact: Wash with plenty of water. Remove contaminated clothing. Seek medical advice if effects persist.

Eyes: Wash with plenty of water. Remove contact lenses and keeping eyelids open. Seek immediate medical assistance.

Ingestion: Never induce vomiting. Seek immediate medical assistance.

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

Harmful Product, prolonged exposure due to inhalation may cause anaesthetic effects. Immediate medical assistance is required.

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

In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious.

5. Fire-fighting measures

5.1 Suitable extinguishing media.

Recommended extinguishing methods: Foam. Dry powder. Carbon dioxide. Water spray. Sand.

5.2 Special hazards arising from the substance.

Special risks: Under fire conditions, hazardous fumes may present.

5.3 Advice for firefighters.

Do not enter fire area without proper protective equipment, including respiratory protection.

Fire protection equipment: According to the size of the fire, it may be necessary to use protective suits against the heat, individual breathing equipment, gloves, protective goggles or facemasks, and gloves.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures.

For exposure control and individual protection measures, see section 8.

6.2 Environmental precautions.

Product dangerous for the environment. Do not allow it to enter the drainage system. Avoid pollution of the soil, water supplies and drains.

6.3 Methods and material for containment and cleaning up.

The contaminated area should be immediately cleaned with an appropriate de-contaminator. Store away from other materials. Collect spillage.

6.4 Reference to other sections.

For exposure control and individual protection measures, see section 8.

For later elimination of waste, follow the recommendations under section 13.

7. Handling and storage

7.1 Precautions for safe handling.

The product does not require special handling measures. Ensure good ventilation and renewal of the air in the premises.

Do not eat, drink or smoke when using this product.

7.2 Conditions for safe storage, including any incompatibilities.

The product does not require special storage measures. Well sealed containers. Away from sources of ignition and heat.

7.3 Specific end use(s).

None.

8. Exposure controls/personal protection

8.1 Control parameters.

The product contain substances with Professional Exposure Environmental Limit Values.

Iodine : $1\text{mg}/\text{m}^3$ (short term)

TWA : $1\text{mg}/\text{m}^3$ - peak limitation

A time weighted average (TWA) has been established for Iodine (Safe Work Australia) of $1\text{mg}/\text{m}^3$, (0.1 ppm) - Peak Limitation.

The exposure value at the TWA is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week.

*Peak Limitation - a ceiling concentration which should not be exceeded over a measurement period which should be as short as possible but not exceeding 15 minutes.

The product does NOT contain substances with Biological Limit Values.

8.2 Exposure controls.

Personal protection : Avoid all unnecessary exposure.

Respiratory protection : Wear approved mask.

Hand protection : Wear protective gloves.

Eye protection : Chemical goggles or safety glasses.

Others : When using, do not eat, drink or smoke.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties.

Appearance: Solid.

Colour: Dark violet crystals.

Odour: Stinging.

Odour threshold: No data available.

pH value:	5.4
Melting Point:	114 °C
Boiling Point:	185 °C
Flash point:	No data available.
Flammability (solid, gas) :	The product is not flammable.
Evaporation rate :	No data available.
Vapour pressure:	No data available.
Vapour density :	8.8
Lower Explosive Limit:	Not applicable.
Upper Explosive Limit:	No data available.
Solubility:	No data available.
Density:	No data available.
Relative density:	4.93 g/cm ³
Partition coefficient (n-octanol/water):	2.49 (log Pow)
Decomposition temperature:	No data available.
Viscosity:	No data available.
Explosive properties:	Not classified as explosive.
Oxidizing properties:	No data available.

9.2 Other information.

None.

10. Stability and reactivity

10.1 Reactivity.

The product does not present hazards by their reactivity.

10.2 Chemical stability.

Sublimable.

10.3 Possibility of hazardous reactions.

Neutralization can occur on contact with bases.

10.4 Conditions to avoid.

Avoid contact with bases.

10.5 Incompatible materials.

No information available.

10.6 Hazardous decomposition products.

Depending on conditions of use, can be generated corrosive vapors or gases.

11. Toxicological information

11.1 Information on toxicological effects.

Acute toxicity.	LD50 oral rat : 14000 mg/kg
Inhalation:	Harmful if inhaled.
Dermal:	Harmful in contact with skin.
Ingestion:	Based on available data, the classification criteria are not met.
Corrosion:	Based on available data, the classification criteria are not met.
Irritation:	Based on available data, the classification criteria are not met.
Sensitization:	Based on available data, the classification criteria are not met.
Mutagenicity:	Based on available data, the classification criteria are not met.
Carcinogenicity:	Based on available data, the classification criteria are not met.
Toxic for reproduction:	Based on available data, the classification criteria are not met.
STOT-single exposure:	Based on available data, the classification criteria are not met.
STOT-repeated exposure:	Based on available data, the classification criteria are not met.
Aspiration hazard:	Based on available data, the classification criteria are not met.

12. Ecological information

12.1 Toxicity.

Toxicity to fish.

LC50 Oncorhynchus mykiss : 0.53 mg/l ; 96 h

Toxicity to Aquatic invertebrates.

EC50 Daphnia magna : 0.33 mg/l ; 48 h

12.2 Persistence and Degradability.

Biodegradable.

12.3 Bioaccumulative potential.

Partition coefficient: n-octanol/water log Pow: 2.49

12.4 Mobility in soil.

No information is available about the mobility in soil.

The product must not be allowed to go into sewers or waterways. Prevent penetration into the ground.

12.5 Results of PBT and vPvB assessment.

The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

12.6 Other adverse effects.

No information is available about other adverse effects for the environment.

13. Disposal considerations

13.1 Waste treatment methods.

Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations.

14. Transport information

14.1 UN number.

UN No: UN3495

14.2 UN proper shipping name.

ADR: UN 3495, IODINE, 8 (6.1), PG III, (E)

IMDG: UN 3495, IODINE, 8 (6.1), PG III

ICAO: UN 3495, IODINE, 8 (6.1), PG III

14.3 Transport hazard class(es).

Class(es): 8 (6.1)

14.4 Packing group.

Packing group: III

14.5 Environmental hazards.

Marine pollutant: Yes

14.6 Special precautions for user.

Labels: 8, 6.1

Hazard number: 86

ADR LQ: 5 kg

Provisions concerning carriage in bulk ADR:

VC1 : Carriage in bulk in sheeted vehicles, sheeted containers or sheeted bulk containers is permitted.

VC2 : Carriage in bulk in closed vehicles, closed containers or closed bulk containers is permitted.

AP7 : Carriage in bulk shall only be as a full load.

Transport by ship, FEm – Emergency sheets (F – Fire, S - Spills): F-A,S-B

Proceed in accordance with point 6.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code.

The product is not transported in bulk.

15. Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance.

Ensure all national/local regulations are observed.

The product is not affected by REACH Restrictions - Annex XVII

The product is not affected by REACH Authorisation - Annex XIV

15.2 Chemical safety assessment.

Not Scheduled.

16. Other Information

Abbreviations and acronyms :

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

EC50: Effective concentration, 50%

IC50: Inhibitory Concentration, 50%

LC50: Lethal concentration, 50%.

LD50: Lethal dose, 50%.

IATA: International Air Transport Association.

ICAO: International Civil Aviation Organization.

IMDG: International Maritime Code for Dangerous Goods.

PBT: persistent, bioaccumulative and toxic. vPvB: very persistent and very bioaccumulative.

Sources of key data used.

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Review number and date.

v. 1.0

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Further information.
None.

In accordance with REACH Regulation (CE) N° 1907/2006 and with CLP Regulation (CE) N° 1272/2008

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