

Camlab Limited – Material Safety Data Sheet


1. Identification

Product Code CC/0377-CH

Product Name **IODINE A.R.**

Molecular Formula **I₂ =253.81**

CAS Number **7553-56-2**

Supplier: **CAMLAB LIMITED**
**Norman Way Industrial Estate
Over
Cambridge
England
CB4 5WE**

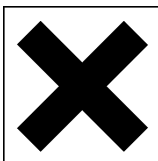
Phone **01954 233110**
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24hr 112
(Have this document to hand)

2. Composition

| Component | CAS No | EEC No | Conc w/w | Classification & Risk Phrases | Exp (See 8.1) |
|-----------|-----------|-----------|----------|-------------------------------|---------------|
| Iodine | 7553-56-2 | 231-442-4 | > 99.0% | Xn : R20/21,R50 | WEL |

3. Hazards Identification



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

4. 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.

5. Fire Fighting Measures

Hazards Evacuate area immediately. Keep up wind. Avoid exposure to toxic vapours and fumes. Fire-fighters should wear protective clothing and breathing apparatus. May evolve toxic fumes if involved in a fire.

Extinguishing Media Consider what other flammable materials are present and act accordingly.

Unsuitable Media Nothing specified.

6. Accidental Release Measures

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

7. Storage & Handling

| | |
|----------------------|--|
| Handling Precautions | 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. |
| Storage Conditions | Well ventilated, cool, dry storage . Keep well separated from food and food containers. |

8.1 Workplace Exposure Limits

| Component | CAS No | Workplace Exposure Limits | | | | Maximum Exposure Limits | | | |
|-----------|-----------|---------------------------|--------------------|------------|--------------------|-------------------------|--------------------|------------|--------------------|
| | | Long Term | | Short Term | | Long Term | | Short Term | |
| | | ppm | mg m ⁻³ | ppm | mg m ⁻³ | ppm | mg m ⁻³ | ppm | mg m ⁻³ |
| Iodine | 7553-56-2 | - | - | 0.1000 | 1.000 | - | - | - | - |

8.2 Personal Protection

| | |
|-------------|---|
| Respiratory | 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. |
| Hands | Wear gloves. |
| Eyes | Use chemical splash proof glasses or goggles. |
| Skin | Avoid contact with skin. If skin contact or contamination of clothing is likely, protective clothing must be worn. |

9. Physical & Chemical Properties

| | |
|-----------------------|---|
| Appearance | Bluish-black crystals which evolve a violet corrosive vapour. |
| Odour | Pungent and intensely irritating. |
| pH | Not available |
| Boiling point | 184.3 °C |
| Melting point | 113.0 °C |
| Flash point | Not available |
| Upper Flammable Limit | Not available |
| Lower Flammable Limit | Not available |
| Auto Ignition | Not available |
| Explosive properties | No. |
| Oxidising Properties | No. |
| Vapour Pressure | Not available |
| Relative Density | 4.9300 °C |
| Water Solubility | Sparingly soluble in water. |

10. Stability & Reactivity

| | |
|---------------------|--|
| Chemical Stability | Stable under normal conditions |
| Conditions to Avoid | Prolonged heat. |
| Materials to Avoid | 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. Stability & Reactivity (continued)

Hazardous Decomposes to evolve toxic and corrosive iodine vapour.
Decomposition Products

11. Toxicological Information

Eyes The vapour is irritating to the eyes.

Skin Stains skin. Intensely irritating to the skin causing redness, pain and burns. Skin absorption may be an important exposure route producing toxic effects similar to inhalation.

LD50 Skin Not available

Ingest Ingestion of large amounts will cause abdominal pain, nausea, vomiting and diarrhoea. Purging, excessive thirst and circulatory failure may develop in severe cases.

LD50 Ingest Not available

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.

Carcinogenicity Not considered to be a carcinogen.

Mutagenicity Not considered to be a mutagen.

Reproductive Effects None identified.

12. Ecological

Small amounts present no specific environmental hazard. Very toxic to aquatic organisms.

13. Disposal Considerations

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.

14. Transport Information

Proper Shipping Name Corrosive Solid, Acidic, Inorganic, N.O.S. (Iodine)
UN Number 3260
UN Classification 8 Corrosive
Subsidiary Risk None
Flash Point Not available
Packing Group II
Transport Category 2
Marine pollutant No
ADR Hazard ID 80

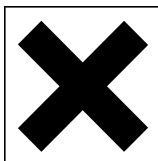


15. Regulatory Information

Labelling Harmful.
Classification

Label Symbols

Xn



Risk & safety Phrases Harmful by inhalation and in contact with skin. Very toxic to aquatic organisms. Keep out of reach of children. Do not breath vapour. Avoid contact with eyes. Avoid release to the environment, refer to special instructions/safety data sheet.

EEC Number 231-442-4

16. Other Information

Document Information This document has been prepared in accordance with directive 88/379/EEC.

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment.

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