

## Iodine Monochloride

### SECTION 1. IDENTIFICATION

<b>Product Identifier</b>	Iodine Monochloride
<b>Other Means of Identification</b>	Chloroiodane, Iodine chloride
<b>Product Code(s)</b>	IO2410
<b>Product Family</b>	Inorganic Solid
<b>Recommended Use</b>	Laboratory.
<b>Restrictions on Use</b>	Not for food, drug, pesticide or biocidal product use.
<b>Supplier Identifier</b>	Alphachem Limited, 2485 Milltower Court, Mississauga, Ontario, L5N 5Z6, (905) 821-2995
<b>Emergency Phone No.</b>	Infotrac, 1-800-535-5053, 24 Hours
<b>SDS No.</b>	1529

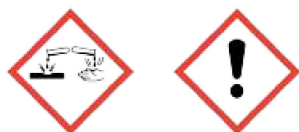
### SECTION 2. HAZARD IDENTIFICATION

Classified according to Canada's Hazardous Products Regulations (WHMIS 2015) and the US Hazard Communication Standard (HCS 2012).

#### Classification

Skin corrosion - Category 1B; Specific target organ toxicity (single exposure) - Category 3

#### Label Elements



Signal Word:  
Danger

#### Hazard Statement(s):

Causes severe skin burns and eye damage.  
May cause respiratory irritation.

#### Precautionary Statement(s):

##### Prevention:

Wear protective gloves/protective clothing/eye protection/face protection.

##### Response:

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Call a POISON CENTRE or doctor if you feel unwell.

##### Storage:

Store in a well-ventilated place. Keep container tightly closed.

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Disposal:  
Dispose of contents and container in accordance with local, regional, national and international regulations.

**Other Hazards**

None known.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance:

Chemical Name	CAS No.	%	Other Identifiers	Other Names
IODINE MONOCHLORIDE	7790-99-0	>=90 - <=100	Chloroiodane, Iodine chloride	

### SECTION 4. FIRST-AID MEASURES

**First-aid Measures**

**Inhalation**

Move to fresh air. If breathing is difficult, trained personnel should administer emergency oxygen if advised to do so by Poison Centre or doctor. Immediately call a Poison Centre or doctor.

**Skin Contact**

Immediately rinse with lukewarm, gently flowing water for 15-20 minutes. Immediately call a Poison Centre or doctor.

**Eye Contact**

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. Contact physician immediately.

**Ingestion**

Do not induce vomiting. Immediately call a Poison Centre or doctor.

**First-aid Comments**

Immediate medical attention is required. Provide general supportive measures (comfort, warmth, rest). Do not leave the victim unattended.

**Most Important Symptoms and Effects, Acute and Delayed**

For most important symptoms and effects (acute and delayed), see Section 2 (Hazard Identification) and Section 11 (Toxicological Information) of this SDS.

**Immediate Medical Attention and Special Treatment**

**Special Instructions**

General advice, consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

### SECTION 5. FIRE-FIGHTING MEASURES

**Extinguishing Media**

**Suitable Extinguishing Media**

Not combustible. Use extinguishing agent suitable for surrounding fire. Carbon dioxide, dry chemical powder or appropriate foam.

**Unsuitable Extinguishing Media**

Water.

**Specific Hazards Arising from the Product**

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Reacts violently with water and organic materials with the evolution of heat. Contact with water liberates toxic gas. Heating increases the release of toxic vapour. Closed containers may rupture violently when heated releasing contents.

In a fire, the following hazardous materials may be generated: corrosive hydrogen chloride. Hydrogen Iodide.

#### **Special Protective Equipment and Precautions for Fire-fighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full

protective gear.

Chemical protective clothing (e.g. chemical splash suit) and positive pressure SCBA may be necessary.

## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

### **Personal Precautions, Protective Equipment, and Emergency Procedures**

Use the personal protective equipment recommended in Section 8 of this safety data sheet. Increase ventilation to area or move leaking container to a well-ventilated and secure area. Remove or isolate incompatible materials as well as other hazardous materials.

### **Environmental Precautions**

Do not allow into any sewer, on the ground or into any waterway.

### **Methods and Materials for Containment and Cleaning Up**

Avoid generating dust. Collect using shovel/scoop or approved HEPA vacuum and place in a suitable container for disposal.

## **SECTION 7. HANDLING AND STORAGE**

### **Precautions for Safe Handling**

Wear personal protective equipment to avoid direct contact with this chemical. Avoid generating dusts. Only use where there is adequate ventilation. Prevent accidental contact with incompatible chemicals. Keep containers tightly closed when not in use or empty.

### **Conditions for Safe Storage**

Store in an area that is: cool, dry, well-ventilated, separate from incompatible materials (see Section 10: Stability and Reactivity). Protect from conditions listed in Conditions to Avoid in Section 10 (Stability and Reactivity). Store in the original, labelled, shipping container.

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

### **Control Parameters**

Not available.

Consult local authorities for provincial exposure limits. Consult local authorities for state exposure limits.

### **Appropriate Engineering Controls**

Use local exhaust ventilation and enclosure, if necessary, to control amount in the air. Provide eyewash and safety shower if contact or splash hazard exists.

### **Individual Protection Measures**

#### **Eye/Face Protection**

Wear chemical safety goggles and face shield when contact is possible.

#### **Skin Protection**

Wear chemical protective clothing e.g. gloves, aprons, boots.

Suitable materials are: butyl rubber.

#### **Respiratory Protection**

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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## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### Basic Physical and Chemical Properties

Appearance	Dark brown powder.
Odour	Pungent
Odour Threshold	Not available
pH	Not available
Melting Point/Freezing Point	14 - 27 °C (57 - 81 °F) (melting); 14 - 27 °C (57 - 81 °F) (freezing)
Initial Boiling Point/Range	97 °C (207 °F)
Flash Point	Not applicable
Evaporation Rate	Not available
Flammability (solid, gas)	Will not burn.
Upper/Lower Flammability or Explosive Limit	Not available (upper); Not available (lower)
Vapour Pressure	Not available
Vapour Density (air = 1)	Not available
Relative Density (water = 1)	3.1
Solubility	Not available in water; Not available (in other liquids)
Partition Coefficient, n-Octanol/Water (Log Kow)	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	97 °C (207 °F)
Viscosity	Not available (kinematic); Not available (dynamic)
Other Information	
Molecular Weight	162.36
Other Physical Property 1	Note: Above Relative Density measured at 29 deg C.

## SECTION 10. STABILITY AND REACTIVITY

### Reactivity

Reacts with water to produce heat.

### Chemical Stability

Unstable under certain conditions - see Conditions to Avoid.

### Possibility of Hazardous Reactions

Reacts in the presence of water. Releases a large amount of heat. Reacts violently in the presence of alkali metals. May cause an explosion.

### Conditions to Avoid

Light. Excess heat. Incompatible materials. Exposure to air.

### Incompatible Materials

Metals (e.g. aluminum), water, rubber, alkali metals. Organic substances.

### Hazardous Decomposition Products

Corrosive hydrogen chloride; iodine.

## SECTION 11. TOXICOLOGICAL INFORMATION

### Likely Routes of Exposure

Inhalation; skin contact; eye contact; ingestion.

### Acute Toxicity

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Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
IODINE MONOCHLORIDE	Not available	Not available	Not available

#### Skin Corrosion/Irritation

Causes severe skin burns.

#### Serious Eye Damage/Irritation

Causes serious eye damage based on skin corrosion information.

#### STOT (Specific Target Organ Toxicity) - Single Exposure

##### Inhalation

May cause severe nose and throat irritation.

##### Ingestion

No information was located.

#### Aspiration Hazard

No information was located.

#### STOT (Specific Target Organ Toxicity) - Repeated Exposure

No information was located.

#### Respiratory and/or Skin Sensitization

No information was located.

#### Carcinogenicity

Chemical Name	IARC	ACGIH®	NTP	OSHA
IODINE MONOCHLORIDE	Not Listed	Not designated	Not Listed	Not Listed

#### Reproductive Toxicity

##### Development of Offspring

No information was located.

##### Sexual Function and Fertility

No information was located.

##### Effects on or via Lactation

No information was located.

#### Germ Cell Mutagenicity

No information was located.

#### Interactive Effects

No information was located.

## SECTION 12. ECOLOGICAL INFORMATION

This section is not required by WHMIS. This section is not required by OSHA HCS 2012.

## SECTION 13. DISPOSAL CONSIDERATIONS

#### Disposal Methods

Dispose of contents and container in accordance with local, regional, national and international regulations.

## SECTION 14. TRANSPORT INFORMATION

Regulation	UN No.	Proper Shipping Name	Transport Hazard Class(es)	Packing Group
US DOT	UN1792	IODINE MONOCHLORIDE, SOLID	8	II

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Canadian TDG	UN1792	IODINE MONOCHLORIDE, SOLID	8	II
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**Special Precautions** Not applicable

**Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable

## SECTION 15. REGULATORY INFORMATION

### Safety, Health and Environmental Regulations

#### Canada

**Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)**

Listed on the DSL.

#### USA

**Toxic Substances Control Act (TSCA) Section 8(b)**

Listed on the TSCA Inventory.

## SECTION 16. OTHER INFORMATION

<b>NFPA Rating</b>	<b>Health - 4</b>	<b>Flammability - 1</b>	<b>Instability - 1</b>
<b>SDS Prepared By</b>	Alphachem Limited		
<b>Phone No.</b>	(905)-821-2995		
<b>Date of Preparation</b>	April 09, 2018		
<b>Date of Last Revision</b>	April 09, 2018		
<b>Revision Indicators</b>	The following SDS content was changed on April 10, 2018: SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION; Exposure Guidelines.		
<b>References</b>	CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS). GESTIS Substance Database (included by CCOHS).		
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