

## 0.1N Iodine

### SECTION 1. IDENTIFICATION

<b>Product Identifier</b>	0.1N Iodine
<b>Other Means of Identification</b>	Iodine solution
<b>Product Code</b>	IO2190E
<b>Product Family</b>	Inorganic
<b>Recommended Use</b>	Laboratory.
<b>Restrictions on Use</b>	None known.
<b>Supplier Identifier</b>	Alphachem Limited, 2485 Milltower Court, Mississauga, Ontario, L5N 5Z6, (905) 821-2995
<b>Emergency Phone No.</b>	CANUTEC CANADA, 613-996-6666, 24 Hours
<b>SDS No.</b>	0113

### SECTION 2. HAZARD IDENTIFICATION

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

#### Classification

Skin irritation - Category 2; Eye irritation - Category 2A; Skin sensitization - Category 1

#### Label Elements



Signal Word:  
Warning

#### Hazard Statement(s):

Causes skin irritation.  
May cause an allergic skin reaction.  
Causes serious eye irritation.

#### Precautionary Statement(s):

Avoid breathing dust/fume/gas/mist/vapours/spray.  
Wash hands and skin thoroughly after handling.  
Contaminated work clothing must not be allowed out of the workplace.  
Avoid release to the environment.  
Wear protective gloves/protective clothing/eye protection/face protection.  
IF ON SKIN: Wash with plenty of water/  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.  
Continue rinsing.  
If skin irritation or rash occurs: Get medical advice/attention.  
Brush off loose particles from skin. Immerse in cool water or wrap in wet bandages.

If eye irritation persists: Get medical advice/attention.  
Take off contaminated clothing and wash it before reuse.

#### Other Hazards

None known.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture:

Chemical Name	CAS No.	%	Other Identifiers
Water	7732-18-5	~95	Dihydrogen Oxide
Potassium iodide	7681-11-0	4.0	Hydriodic acid, potassium salt
Iodine	7553-56-2	1.3	Elemental iodine

## SECTION 4. FIRST-AID MEASURES

### First-aid Measures

#### Inhalation

Move to fresh air. Keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms (e.g. coughing, shortness of breath, wheezing), call a Poison Centre or doctor.

#### Skin Contact

Rinse skin with water or shower. If skin irritation occurs, get medical advice or attention. Thoroughly clean clothing, shoes and leather goods before reuse or dispose of safely.

#### Eye Contact

Quickly and gently blot or brush chemical off the face. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice or attention.

#### Ingestion

Do not induce vomiting. Rinse mouth with water. Immediately call a Poison Centre or doctor.

#### First-aid Comments

Some of the first-aid procedures recommended here require advanced first-aid training. If exposed or concerned, get medical advice or attention.

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

If inhaled: skin sensitizer. May cause an allergic skin reaction in some people. If on skin: causes mild irritation. If in eyes: causes moderate to severe irritation.

### 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

Carbon dioxide, dry chemical powder, appropriate foam, water spray or fog.

#### Unsuitable Extinguishing Media

Do not use a solid (straight) water stream as it may scatter and spread fire.

### Specific Hazards Arising from the Product

Does not burn.

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

Use extreme caution. Fight fire from a protected, explosion-resistant location or maximum distance possible. For a massive fire, immediately evacuate the area and use unmanned hose holder or monitor nozzles.

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Fire-fighters may enter the area if positive pressure SCBA and full Bunker Gear is worn. 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. Do not touch damaged containers or spilled product unless wearing appropriate protective equipment.

### Environmental Precautions

It is good practice to prevent releases into the environment.

### Methods and Materials for Containment and Cleaning Up

Contain and soak up spill with absorbent that does not react with spilled product. Place used absorbent into suitable, covered, labelled containers for disposal.

## SECTION 7. HANDLING AND STORAGE

### Precautions for Safe Handling

Wear personal protective equipment to avoid direct contact with this chemical. Only use where there is adequate ventilation. Avoid generating vapours or mists. Avoid release to the environment. Prevent accidental contact with incompatible chemicals. Inspect container and lid carefully for damage, leaks or signs of peroxide crystallization before handling. Wash hands thoroughly after handling this product and before eating, using the washroom or leaving work area.

### Conditions for Safe Storage

Store in an area that is: cool, dry, well-ventilated, out of direct sunlight and away from heat and ignition sources, separate from incompatible materials (see Section 10: Stability and Reactivity). Store in the original, labelled, shipping container. Have escape-type respiratory protective equipment readily available, in case of leaks or spills. Label container with date received, date opened and disposal date. Use a first-in, first-out inventory system. Comply with all applicable health and safety regulations, fire and building codes.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control Parameters

Chemical Name	ACGIH TLV®		OSHA PEL		AIHA WEEL	
	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA
Water	Not established		Not established			
Iodine	0.01 ppm A4	0.1 ppm	Not established			
Potassium iodide	0.01 ppm A4		Not established			

### Appropriate Engineering Controls

General ventilation is usually adequate. Use local exhaust ventilation, if general ventilation is not adequate 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, neoprene rubber, nitrile rubber, Viton®, Tychem® SL (Saranex™), Tychem® Responder.

#### Respiratory Protection

Wear a NIOSH approved air-purifying respirator with an appropriate cartridge.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### Basic Physical and Chemical Properties

Appearance	Amber liquid.
Odour	Not available
Odour Threshold	Not available
pH	Not available
Melting Point/Freezing Point	Not available (melting); Not available (freezing)
Initial Boiling Point/Range	Not available
Flash Point	Not available
Evaporation Rate	Not available
Flammability (solid, gas)	Not available
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)	Not available
Solubility	Soluble in water; Not available (in other liquids)
Partition Coefficient, n-Octanol/Water (Log Kow)	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Viscosity	Not available (kinematic); Not available (dynamic)
Other Information	
Physical State	Liquid

## SECTION 10. STABILITY AND REACTIVITY

### Reactivity

Not reactive under normal conditions of use.

### Chemical Stability

Normally stable.

### Possibility of Hazardous Reactions

Not established.

### Conditions to Avoid

Sunlight. High temperatures. Low temperatures.

### Incompatible Materials

Metals (e.g. aluminum), strong reducing agents (e.g. hydrides), ammonia, strong bases (e.g. sodium hydroxide).

### Hazardous Decomposition Products

Iodine vapour. Potassium oxide. Corrosive hydrogen chloride.

## SECTION 11. TOXICOLOGICAL INFORMATION

### Likely Routes of Exposure

Inhalation; skin contact; eye contact; ingestion.

### Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Water	Not available	> 89840 mg/kg (rat)	Not available

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Iodine	Not available	14000 mg/kg (rat)	220 mg/kg (rat)
Potassium iodide	Not available	Not available	Not available

#### **Skin Corrosion/Irritation**

May cause very mild irritation based on information for closely related chemicals.

#### **Serious Eye Damage/Irritation**

May cause serious eye irritation based on information for closely related materials.

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

##### **Inhalation**

No information was located.

##### **Skin Absorption**

No information was located.

##### **Ingestion**

May cause irritation of the mouth, throat and stomach, a laxative effect. Symptoms may include nausea, vomiting, stomach cramps and diarrhea.

#### **Aspiration Hazard**

No information was located.

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

Thyroid function tests may show abnormal results.

#### **Respiratory and/or Skin Sensitization**

No information was located.

#### **Carcinogenicity**

Chemical Name	IARC	ACGIH®	NTP	OSHA
Water	Not Listed	Not Listed	Not Listed	Not Listed
Iodine	Not Listed	Not Listed		
Potassium iodide	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**

Not regulated under Canadian TDG regulations. Not regulated under US DOT Regulations.

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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

**SDS Prepared By** Alphachem Ltd.

**Phone No.** (905)-821-2995

**Date of Preparation** September 08, 2015

**Date of Last Revision** March 21, 2016

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