

# **lodine Monochloride - Wij's Solution**

# **SECTION 1. IDENTIFICATION**

Product Identifier Iodine Monochloride - Wij's Solution

Other Means of

None

Identification

Product Code(s) IO2490

Product Family Organic/Inorganic Solution

Recommended Use Laboratory.

**Restrictions on Use** Not for food, drug, pesticide or biocidal product use.

Supplier Identifier Alphachem Limited, 2485 Milltower Court, Mississauga, Ontario, L5N 5Z6, (905) 821-2995

Emergency Phone No. Infotrac, 1-800-535-5053, 24 Hours

**SDS No.** 1527

# **SECTION 2. HAZARD IDENTIFICATION**

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

#### Classification

Flammable liquid - Category 3; Skin corrosion - Category 1A; Serious eye damage - Category 1

#### **Label Elements**





Signal Word: Danger

Hazard Statement(s):

Flammable liquid and vapour.

Causes severe skin burns and eye damage.

Precautionary Statement(s):

Prevention:

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Ground/bond container and receiving equipment.

Use explosion-proof electrical, ventilating, and lighting equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Wash hands thoroughly after handling.

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

Response:

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IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

IF ON SKIN: Wash with plenty of water.

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

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

Continue rinsing.

Immediately call a POISON CENTRE or doctor.

Storage:

Store in accordance with local, regional, national and international regulations.

#### Other Hazards

None known.

# **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

#### Mixture:

Chemical Name	CAS No.	%	Other Identifiers	Other Names
lodine Monochloride	7790-99-0	1 - 2	Chloroiodane, lodine Chloride	
Acetic acid	64-19-7		Ethanoic acid, Methanecarboxyli c acid	

# **SECTION 4. FIRST-AID MEASURES**

#### **First-aid Measures**

#### Inhalation

Move to fresh air. Seek immediate medical attention.

#### Skin Contact

Immediately rinse skin with lukewarm, gently flowing water for at least 30 minutes. Immediately call a Poison Centre or doctor.

#### **Eye Contact**

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for at least 30 minutes, while holding the eyelid(s) open. Immediately call a Poison Centre or doctor. Specific treatment is required.

# Ingestion

Rinse mouth with water. Do not induce vomiting. Contact a physician.

#### **First-aid Comments**

Treat symptomatically. Symptoms made be delayed. 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**

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#### Suitable Extinguishing Media

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

### **Unsuitable Extinguishing Media**

None known.

# **Specific Hazards Arising from the Product**

Flammable liquid and vapour. Can ignite at room temperature. Releases vapour that can form explosive mixture with air. May travel a considerable distance to a source of ignition and flash back to a leak or open container. 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: very toxic carbon monoxide, carbon dioxide. irritating fumes and acrid smoke.

# **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

Evacuate the area immediately. Isolate the hazard area. Keep out unnecessary and unprotected personnel. 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. Eliminate all ignition sources if safe to do so.

#### **Environmental Precautions**

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

### Methods and Materials for Containment and Cleaning Up

Neutralized with soda ash (Na2CO3), and place into container 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. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Prevent accidental contact with incompatible chemicals. Use non-sparking tools. Never add water to a corrosive. Always add corrosives slowly to COLD water. Keep containers tightly closed when not in use or empty.

### **Conditions for Safe Storage**

Store in an area that is: dry, well-ventilated, out of direct sunlight and away from heat and ignition sources.

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

# **Control Parameters**

	ACGIH TLV®		OSHA PEL		AIHA WEEL	
Chemical Name	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA
Acetic acid	10 ppm	15 ppm	10 ppm			
lodine Monochloride	Not established		Not established			

Iodine Monochloride:

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. Use non-sparking ventilation systems, approved explosion-proof equipment and intrinsically safe electrical systems in areas where this product is used and stored. Provide eyewash and safety shower if contact or splash hazard exists.

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#### **Individual Protection Measures**

### **Eye/Face Protection**

Wear chemical safety goggles.

### **Skin Protection**

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

Suitable materials are: butyl rubber, Viton®.

# **Respiratory Protection**

For non-routine or emergency situations: wear a NIOSH approved air-purifying respirator with an organic vapour cartridge, wear a full facepiece NIOSH approved air-purifying respirator with an acid gas cartridge.

# **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

# **Basic Physical and Chemical Properties**

Appearance Amber liquid.

Odour Vinegar

Odour Threshold Not available

pH <

Melting Point/Freezing Point 17 - 18 °C (63 - 64 °F) (melting); 17 - 18 °C (63 - 64 °F) (freezing)

Initial Boiling Point/Range 118 °C (244 °F)

Flash Point  $39 - 41 \,^{\circ}\text{C} \, (102 - 106 \,^{\circ}\text{F})$ Evaporation Rate  $> 1 \, (\text{diethyl ether} = 1)$ 

Flammability (solid, gas) Not applicable

**Upper/Lower Flammability or** 19.9% (upper); 4.0% (lower)

**Explosive Limit** 

Vapour Pressure 11 mm Hg (1 kPa)

Vapour Density (air = 1) 2.10 Relative Density (water = 1) 1.06

**Solubility** Soluble in water; Not available (in other liquids)

Partition Coefficient, Not available

n-Octanol/Water (Log Kow)

Auto-ignition TemperatureNot availableDecomposition TemperatureNot available

Viscosity Not available (kinematic); Not available (dynamic)

Other Information

Physical State Liquid

# **SECTION 10. STABILITY AND REACTIVITY**

# Reactivity

None known.

#### Chemical Stability

Normally stable.

#### **Possibility of Hazardous Reactions**

Hazardous polymerization does not occur.

# **Conditions to Avoid**

Incompatible materials. Open flames, sparks, static discharge, heat and other ignition sources.

### **Incompatible Materials**

Strong oxidizing agents (e.g. perchloric acid), metals (e.g. aluminum), alcohols (e.g. ethanol), amines (e.g. triethylamine), ammonia, oxidizing agents (e.g. peroxides), strong bases (e.g. sodium hydroxide), strong acids (e.g.

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hydrochloric acid).

# **Hazardous Decomposition Products**

Very toxic carbon monoxide, carbon dioxide. poisonous gases and fumes.

# **SECTION 11. TOXICOLOGICAL INFORMATION**

### **Likely Routes of Exposure**

Inhalation; skin contact; eye contact; ingestion.

# **Acute Toxicity**

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Acetic acid	4653 ppm (rat) (4-hour exposure)	3530 mg/kg (rat)	1060 mg/kg (rabbit)
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

May cause severe irritation or burns to the mouth, throat and stomach.

# **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
Acetic acid	Not evaluated	Not designated	Not Listed	Not Listed
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### **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**

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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	UN2920	Corrosive liquid, flammable, n.o.s. (lodine Monochloride Solution)	8 (3)	II
Canadian TDG	UN2920	Corrosive liquid, flammable, n.o.s. (lodine Monochloride Solution)	8 (3)	II

**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)

All ingredients are listed on the DSL.

**USA** 

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

All ingredients are listed on the TSCA Inventory.

# **SECTION 16. OTHER INFORMATION**

SDS Prepared By Alphachem Limited Phone No. (905)-821-2995

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References CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS).

GESTIS Substance Database (included by CCOHS).

**Disclaimer** This document is offered only as a guide in the safe handling of the above product, and has

been prepared from the best information currently available. It is not intended to be all-inclusive and the conditions of use may involve other additional considerations. Since Alphachem Limited cannot anticipate or control the conditions under which the product may be used, it will not be liable for any claims, damages or losses which may result from the use or

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