

SAFETY DATA SHEET

Preparation Date: No data available

Revision Date: 02/11/2015

Revision Number: G1

Product identifier

Product code: I1022
Product Name: IODINE MONOCHLORIDE, REAGENT, ACS

Other means of identification

Synonyms: No information available
CAS #: 7790-99-0
RTECS # NN1650000
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: No information available.
Uses advised against No information available

Supplier: Spectrum Chemicals and Laboratory Products, Inc.
14422 South San Pedro St.
Gardena, CA 90248
(310) 516-8000

Order Online At: <https://www.spectrumchemical.com>

Emergency telephone number Chemtrec 1-800-424-9300
Contact Person: Martin LaBenz (West Coast)
Contact Person: Ibad Tirmiz (East Coast)

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 3
Acute toxicity - Dermal	Category 3
Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1

Label elements

Danger

Hazard statements

Toxic if swallowed
Toxic in contact with skin
Causes severe skin burns and eye damage



Hazards not otherwise classified (HNOC)

Not Applicable

Other hazards

Not available

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapors/spray
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

Specific treatment (see .? on this label)
Immediately call a POISON CENTER or doctor/physician
Specific treatment (see .? on this label)
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 CENTER or doctor/physician.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
Wash contaminated clothing before reuse
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
Rinse mouth
Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %	Trade Secret
Iodine Monochloride 7790-99-0	7790-99-0	100	*

4. FIRST AID MEASURES

First aid measures

General Advice:

Poison information centers in each State capital city can provide additional assistance for scheduled poisons (13 1126)

Skin Contact:

Wash off immediately with soap and plenty of water. Continue flushing with plenty of water for at least 15 minutes. Remove all contaminated clothes and shoes. Immediate medical attention is required. Call a physician or Poison Control Centre immediately. Toxic in contact with skin.

Eye Contact:

Flush eye with water for 15 minutes. Immediate medical attention is required. Call a physician immediately.

Inhalation:

Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. **WARNING!** It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled or ingested material is toxic, infectious or corrosive. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required.

Ingestion:

Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately. Toxic if swallowed.

Most important symptoms and effects, both acute and delayed

Symptoms

Causes skin and eye burns. Eye contact may result in redness or pain. Skin contact may result in redness, pain, inflammation, itching, scaling. Toxic if swallowed. Toxic in contact with skin.

Indication of any immediate medical attention and special treatment needed

Notes to Physician:

Treat symptomatically

Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media:

The product is not flammable.

Unsuitable Extinguishing Media:

Water.

Specific hazards arising from the chemical

Hazardous Combustion Products:

Iodine, Hydrogen Iodide, Hydrogen Chloride

Specific hazards:

Produce toxic and/or corrosive substances on contact with water

Special Protective Actions for Firefighters

Specific Methods:

No information available.

Special Protective Equipment for Firefighters:

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

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions: Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Do not expose spill to water. Remove all sources of ignition.

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Cover with plastic sheet to prevent spreading.

Methods for cleaning up Sweep up and shovel into suitable containers for disposal. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions:

Provide sufficient air exchange and/or exhaust in work rooms. Keep away from incompatible materials.

Safe Handling Advice:

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. Do not ingest. Do not breathe vapours/dust. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:

Keep container tightly closed in a dry and well-ventilated place. Store away from incompatible materials. Sensitive to light. Store in light-resistant containers. Moisture sensitive. Keep refrigerated.

Incompatible Materials:

Bases. Metals. Moisture. Organic materials. Reducing agents. Water.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Components	OSHA	NIOSH	ACGIH	AIHA WHEEL
Iodine Monochloride - 7790-99-0	None	None	None	None

Canada

Components	Alberta	British Columbia	Ontario	Quebec
Iodine Monochloride - 7790-99-0	None	None	None	None

Australia and Mexico

Components	Australia	Mexico
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Iodine Monochloride 7790-99-0	None	None
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Appropriate engineering controls

Engineering measures to reduce exposure: Ensure adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

Eye protection: Safety glasses. Safety glasses with side-shields.

Skin and body protection: Long sleeved clothing. Chemical resistant apron. Gloves.

Respiratory protection: Effective dust mask. Wear respirator with dust filter..

Hygiene measures: Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Solid.	Appearance: Low melting point solid.	Color: Red. Black.
Odor: No information available	Taste No information available	Molecular/Formula weight: 162.36
Formula: ICI	Flash point (°C): No data available	Flashpoint (°C/°F): No information available.
Flash Point Tested according to: Not available	Lower Explosion Limit (%): No information available	Upper Explosion Limit (%): No information available
Autoignition Temperature (°C/°F): No information available	pH: No information available	Melting point/range(°C/°F): 25°-27°C/77°-81°F
Boiling point/range(°C/°F): 96°-98°C/205°-208°F	Decomposition temperature(°C/°F): No information available	Bulk density: No information available
Specific gravity: No information available	Vapor pressure @ 20°C (kPa): No information available	Density (g/cm3): 3.18
Evaporation rate: No information available	Vapor density: No information available	VOC content (g/L): No information available
Odor threshold (ppm): No information available	Partition coefficient (n-octanol/water): No information available	Viscosity: No information available
Miscibility: No information available	Solubility: Hydrolyzes in water	

10. STABILITY AND REACTIVITY

Reactivity

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10. STABILITY AND REACTIVITY

Reacts with reducing agents
Reacts with water

Chemical stability

Stability: Sensitive to light. Exposure to light accelerates decomposition. Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid: Heat. Ignition sources. Incompatible materials. Exposure to light. Exposure to moisture. Exposure to water.

Incompatible Materials: Bases. Metals. Moisture. Organic materials. Reducing agents. Water.

Hazardous decomposition products: Hydrogen chloride. Hydrogen iodide.

Other Information

Corrosivity: No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure:
Eyes. Ingestion. Inhalation. Skin.

Acute Toxicity

Component Information

Iodine Monochloride - 7790-99-0

LD50/oral/rat = 50 mg/kg Oral LDLo Rat

LD50/oral/mouse = No information available

LD50/dermal/rat = 500 mg/kg Dermal LDLo Rat

LD50/dermal/rabbit = No information available

LC50/inhalation/rat = No information available

LC50/inhalation/mouse = No information available

Other LD50 or LC50 information = No information available

Product Information

LD50/oral/rat =
VALUE- Acute Tox Oral = No information available

LD50/oral/mouse =
Value - Acute Tox Oral = No information available

LD50/dermal/rabbit
VALUE-Acute Tox Dermal = No information available

LD50/dermal/rat
VALUE -Acute Tox Dermal = No information available

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LC50/inhalation/rat

VALUE-Vapor = No information available

VALUE-Gas = No information available

VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse

VALUE-Vapor = No information available

VALUE - Gas = No information available

VALUE - Dust/Mist = No information available

Symptoms**Skin Contact:** Contact causes severe skin irritation and possible burns. Toxic in contact with skin.**Eye Contact:** Causes serious eye irritation. Causes eye burns.**Inhalation** May cause irritation of respiratory tract.**Ingestion** Toxic if swallowed.**Aspiration hazard** No information available**Delayed and immediate effects as well as chronic effects from short and long-term exposure****Chronic Toxicity** No information available**Sensitization:** No information available**Mutagenic Effects:** No information available**Carcinogenic effects:** Not considered carcinogenic

Components	ACGIH - Carcinogens	IARC	NTP	OSHA HCS - Carcinogens	Australia - Prohibited Carcinogenic Substances	Australia - Notifiable Carcinogenic Substances
Iodine Monochloride	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

Reproductive toxicity No data is available**Reproductive Effects:** No information available**Developmental Effects:** No information available**Teratogenic Effects:** No information available**Specific Target Organ Toxicity****STOT - single exposure** No information available**STOT - repeated exposure** No information available**Target Organs:** No information available**12. ECOLOGICAL INFORMATION****Ecotoxicity****Ecotoxicity effects:** No data available.

Persistence and degradability: No information available
Bioaccumulative potential: No information available
Mobility: No information available

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal

Components	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Iodine Monochloride	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No: UN1792
Proper Shipping Name: Iodine monochloride, solid
Hazard Class: 8
Subsidiary Risk:
Packing Group: II
ERG No: 157
Marine Pollutant: No data available
DOT RQ (lbs): No information available

Symbol(s):

TDG (Canada)

UN-No: UN1792
Proper Shipping Name: Iodine monochloride
Hazard Class: 8
Subsidiary Risk: No information available
Packing Group: II
Description: No information available

ADR

UN-No: UN1792
Proper Shipping Name: Iodine monochloride
Hazard Class: 8
Packing Group: II
Subsidiary Risk: No information available
Classification Code: No information available
Description: No information available
CEFIC Tremcard No: No information available

IMO / IMDG

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14. TRANSPORT INFORMATION

UN-No: UN1792
Proper Shipping Name: Iodine monochloride, solid
Hazard Class: 8
Subsidiary Risk: No information available
Packing Group: II
Description: No information available
IMDG Page: No information available
Marine Pollutant: No information available
EMS: F-A
MFAG: No information available
Maximum Quantity: No information available

RID

UN-No: UN1792
Proper Shipping Name: Iodine monochloride, solid
Hazard Class: 8
Subsidiary Risk: No information available
Packing Group: II
Classification Code: No information available
Description: No information available

ICAO

UN-No: UN1792
Proper Shipping Name: Iodine monochloride, solid
Hazard Class: 8
Subsidiary Risk: No information available
Packing Group: II
Description: No information available

IATA

UN-No: UN1792
Proper Shipping Name: Iodine monochloride
Hazard Class: 8
Subsidiary Risk: No information available
Packing Group: II
ERG Code: 8L
Description: No information available

15. REGULATORY INFORMATION

International Inventories

Components	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
<i>Iodine Monochloride</i>	Present	Present KE-21028	Present	Present (1)-642	Present	Present	Present 232-236-7

U.S. Regulations

Iodine Monochloride

New Jersey RTK Hazardous Substance List: 1027

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

Chemicals Known to the State of California to Cause Cancer:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

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Components	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Iodine Monochloride	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Components	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting <i>de minimis</i>
<i>Iodine Monochloride</i>	None	None	None	None	None

U.S. TSCA

Components	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
<i>Iodine Monochloride</i>	Not Applicable	Not Applicable

Canada

WHMIS hazard class:

D1A Very toxic materials

D2A Very toxic materials

E Corrosive material

Canada Controlled Products Regulation:

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Components	WHMIS Ingredient Disclosure List -
Iodine Monochloride	1 %

Inventory

Components	Canada (DSL)	Canada (NDSL)
Iodine Monochloride	Present	Not Listed

Components	CEPA Schedule I - Toxic Substances	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Iodine Monochloride	Not listed	Not listed

EU Classification

R-phrase(s)

R25 - Toxic if swallowed.

R35 - Causes severe burns.

S -phrase(s)

none

Components	Classification	Concentration Limits:	Safety Phrases
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Iodine Monochloride		No information	
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The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:

C - Corrosive.

T - Toxic

16. OTHER INFORMATION

Revision Date: 02/11/2015
Prepared by: Sonia Owen

Disclaimer:

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet