



Material Safety Data Sheet Iodine Solutions, 0.01N to 1.0N

Section 1 - Chemical Product and Company Identification

MSDS Name:

Iodine Solutions, 0.01N to 1.0N

Catalog Numbers:

LC15600, LC15610, LC15620, LC15630, LC15660, LC15661, LC15662, LC15674, LC15675, LC19816

Synonyms:

None

Company Identification:

LabChem Inc
200 William Pitt Way
Pittsburgh, PA 15238

Company Phone Number:

(412) 826-5230

Emergency Phone Number:

(800) 424-9300

CHEMTREC Phone Number:

(800) 424-9300 or
011-703-527-3887

Section 2 – Composition, Information on Ingredients

CAS#	Chemical Name:	Percent
7732-18-5	Water	>60
7681-11-0	Potassium iodide	0.2-26
7553-56-2	Iodine	0.1-13
7647-01-0	Hydrochloric acid	<0.2

Section 3 - Hazards Identification

Emergency Overview

Appearance: *Dark red-brown solution*

Warning! *May cause eye, skin, and respiratory tract irritation. May cause central nervous system effects. May cause allergic skin reaction.*

Target Organs: *eyes, skin, respiratory system, central nervous system, blood, liver, kidneys*

Potential Health Effects

Eye:

May cause eye irritation.

Skin:

May cause skin irritation. May cause allergic skin reaction.



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Ingestion:

May cause gastrointestinal irritation with nausea, vomiting, and diarrhea. May cause central nervous system effects.

Inhalation:

May cause respiratory irritation. May cause central nervous system effects. May cause pulmonary edema.

Chronic:

May cause adverse liver and kidney effects. May cause allergic skin reaction. Experiments have shown reproductive toxicity effects in laboratory animals.

Section 4 - First Aid Measures

Eyes:

Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids until no evidence of chemical remains. Get medical aid at once.

Skin:

Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid at once.

Ingestion:

Do not induce vomiting. Give conscious victim 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid at once.

Inhalation:

Move victim to fresh air immediately. If breathing is difficult, administer oxygen. Give artificial respiration if necessary. Get medical aid at once.

Notes to Physician:

Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media:

For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam.

Autoignition Temperature:

No information found.

Flash Point:

No information found.

NFPA Rating:

Health- 2, Flammability- 0, Instability- 0

Explosion Limits:

Lower: n/a Upper: n/a



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Section 6 - Accidental Release Measures

General Information:

Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spill with inert material such as sand, vermiculite, or diatomaceous earth, and transfer to a suitable container labeled for later disposal.

Section 7 - Handling and Storage

Handling:

Wash thoroughly after handling. Do not ingest or inhale. Do not get in eyes, on skin, or on clothing.

Storage:

Store tightly capped in a cool, dry, well-ventilated area away from incompatible materials.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Facilities using or storing this material should be equipped with an eyewash and safety shower. Provide local exhaust or general dilution ventilation to keep airborne levels below the permissible exposure limits.

Exposure Limits:

Chemical Name:	ACGIH	NIOSH	OSHA
Water	None of the components are on this list	None of the components are on this list	None of the components are on this list
Potassium iodide	None of the components are on this list	None of the components are on this list	None of the components are on this list
Iodine	0.01 ppm TWA 0.1 ppm STEL	0.1 ppm Ceiling 1 mg/m ³ Ceiling 2 ppm IDLH	0.1 ppm Ceiling 1 mg/m ³ Ceiling
Hydrochloric acid	2 ppm Ceiling	5 ppm Ceiling 7 mg/m ³ Ceiling 50 ppm IDLH	5 ppm Ceiling 7 mg/m ³ Ceiling

OSHA Vacated PELs:

Hydrochloric acid: 5 ppm Ceiling, 7 mg/m³ Ceiling

Iodine: 0.1 ppm Ceiling, 1 mg/m³ Ceiling

Personal Protective Equipment**Eyes:**

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133. Do not wear contact lenses when working with chemicals.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.



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Respirators:

Follow the OSHA respirator regulations found in 29 CFR 1910.134. Always use a NIOSH-approved respirator when necessary.

Section 9 - Physical and Chemical Properties

Physical State:	Clear liquid
Color:	Dark red-brown
Odor:	Odorless
pH:	No information found.
Vapor Pressure:	No information found.
Vapor Density:	No information found.
Evaporation Rate:	No information found.
Viscosity:	No information found.
Boiling Point:	No information found.
Freezing/Melting Point:	No information found.
Decomposition Temperature:	No information found.
Solubility in water:	Soluble.
Specific Gravity/Density:	1.0-1.1
Molecular Formula:	No information found.
Molecular Weight:	No information found.

Section 10 - Stability and Reactivity

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Incompatible materials, excess heat.

Incompatibilities with Other Materials:

Strong oxidizing agents.

Hazardous Decomposition Products:

Hydrogen iodide, hydrogen chloride.

Hazardous Polymerization:

Has not been reported

Section 11 - Toxicological Information

RTECS:

CAS# 7732-18-5: ZC0110000

CAS# 7681-11-0: TT2975000

CAS# 7553-56-2: NN1575000

CAS# 7647-01-0: MW4025000

LD50/LC50:

CAS# 7732-18-5:

Oral, rat: LD50 = >90 mL/kg

CAS# 7681-11-0:

No information found.



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CAS# 7553-56-2:

Oral, rat: LD50 = 14 g/kg

Dermal, rat: LD50 = 220 mg/kg

CAS# 7647-01-0:

Oral, rat: LD50 = 700 mg/kg

Dermal, rabbit: LD50 = 5010 mg/kg

Inhalation, rat: LC50 = 3124 ppm/1H

Carcinogenicity:

None of the chemicals in the product are listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

Epidemiology:

May cause sensitization by skin contact.

Teratogenicity:

No information found

Reproductive:

Reproductive toxicity effects have occurred in laboratory animals.

Mutagenicity:

No information found

Neurotoxicity:

No information found

Section 12 - Ecological Information

No information found

Section 13 - Disposal Considerations

Dispose of in accordance with Federal, State, and local regulations.

Section 14 - Transport Information

US DOT

Shipping Name: Not regulated

Hazard Class:

UN Number:

Packing Group:

Section 15 - Regulatory Information

US Federal

TSCA:

CAS# 7732-18-5 is listed on the TSCA Inventory.

CAS# 7681-11-0 is listed on the TSCA Inventory.

CAS# 7553-56-2 is listed on the TSCA Inventory.

CAS# 7647-01-0 is listed on the TSCA Inventory.



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SARA Reportable Quantities (RQ):

CAS# 7647-01-0: final RQ = 5000 lb. (2270 kg)

CERCLA/SARA Section 313:

Hydrochloric acid is below the threshold for SARA 313.

OSHA - Highly Hazardous:

This material contains Hydrochloric acid (CAS# 7647-01-0, <0.02%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

US State

State Right to Know:

Hydrochloric acid can be found on the following state Right-to-Know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

Iodine can be found on the following state Right-to-Know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

California Regulations:

None

European/International Regulations

Canadian DSL/NDSL:

CAS# 7732-18-5 is listed on Canada's DSL List.

CAS# 7681-11-0 is listed on Canada's DSL List.

CAS# 7553-56-2 is listed on Canada's DSL List.

CAS# 7647-01-0 is listed on Canada's DSL List.

Canada Ingredient Disclosure List:

CAS# 7732-18-5 is not listed on Canada's Ingredient Disclosure List.

CAS# 7681-11-0 is listed on Canada's Ingredient Disclosure List.

CAS# 7553-56-2 is listed on Canada's Ingredient Disclosure List.

CAS# 7647-01-0 is listed on Canada's Ingredient Disclosure List.

Section 16 - Other Information

MSDS Creation Date: February 18, 1998

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