

SAFETY DATA SHEET

Preparation Date: 08/05/2015

Revision date 2/15/2019

Revision Number: G2

1. IDENTIFICATION

Product identifier

Product code: I-118
Product Name: IODINE, 0.1 N SOLUTION, USP VOLUMETRIC SOLUTION

Other means of identification

Synonyms: No information available
CAS #: Mixture
RTECS # Not available
CI#: Not available

Recommended use of the chemical and restrictions on use

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

Supplier: Spectrum Chemical Mfg. Corp
 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: Tom Tyner (USA - West Coast)
Contact Person: Ibad Tirmiz (USA - East Coast)

2. HAZARDS IDENTIFICATION

Classification

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

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Skin sensitization	Category 1
Reproductive toxicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 1

Label elements

Danger

Hazard statements

Causes serious eye irritation
 Causes skin irritation

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May cause respiratory irritation
May cause an allergic skin reaction
Causes damage to organs through prolonged or repeated exposure
Suspected of damaging fertility or the unborn child



Hazards not otherwise classified (HNOC)

Not Applicable

Other hazards

Not available

Precautionary Statements - Prevention

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Wash face, hands and any exposed skin thoroughly after handling
Contaminated work clothing must not be allowed out of the workplace
Do not breathe dust/fume/gas/mist/vapors/spray
Do not eat, drink or smoke when using this product
Use only outdoors or in a well-ventilated area
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

IF IN EYES: 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/attention.

IF ON SKIN: Wash with plenty of water

Take off contaminated clothing and wash it before reuse

If skin irritation or rash occurs: Get medical advice/attention

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

Precautionary Statements - Storage

Store locked up

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

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No	Weight-%
Water	7732-18-5	94.7
Potassium Iodide	7681-11-0	4
Iodine	7553-56-2	1.3
Hydrochloric Acid	7647-01-0	0.006

4. FIRST AID MEASURES

First aid measures

General Advice: National Capital Poison Center in the United States can provide assistance if you

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have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222.

- Skin Contact:** Wash off immediately with soap and plenty of water removing all contaminated clothing and shoes. Get medical attention. If skin irritation persists, call a physician.
- Eye Contact:** Flush eyes with water for 15 minutes. Get medical attention.
- Inhalation:** Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
- Ingestion:** Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Obtain medical attention.

Most important symptoms and effects, both acute and delayed

- Symptoms** Causes serious eye irritation
Causes skin irritation
May cause an allergic skin reaction
Irritating to respiratory system

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. If it is involved in a fire, extinguish the fire using an agent suitable for the type of surrounding fire.

Unsuitable Extinguishing Media: No information available.

Specific hazards arising from the chemical

Hazardous combustion products No information available.

Specific hazards No information available.

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. Keep people away from and upwind of spill/leak. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Evacuate personnel to safe areas. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not let product enter 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. vermiculite, dry sand or earth), then place in a suitable chemical waste container.

Methods for cleaning up Use appropriate tools to put the spilled material in a suitable chemical waste disposal container. 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. Do not breathe vapors or spray mist. Do not ingest. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:

Sensitive to light. Store in light-resistant containers. Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials.

Incompatible Materials:

Oxidizing agents
Reducing agents
Organic materials
Metals
Acids

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Component	CAS No	OSHA	NIOSH	ACGIH	AIHA WEEL
Water	7732-18-5	None	None	None	None
Potassium Iodide	7681-11-0	None	None	None	None
Iodine	7553-56-2	0.1 ppm Ceiling 1 mg/m ³ Ceiling	0.1 ppm Ceiling 1 mg/m ³ Ceiling	0.1 ppm STEL aerosol and vapor 0.01 ppm TWA inhalable fraction and	None

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				vapor	
Hydrochloric Acid	7647-01-0	5 ppm Ceiling 7 mg/m ³ Ceiling	5 ppm Ceiling 7 mg/m ³ Ceiling	2 ppm Ceiling	Not determined

Canada

Component	CAS No	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Water	7732-18-5	None	None	None	None
Potassium Iodide	7681-11-0	None	None	None	None
Iodine	7553-56-2	0.1 ppm Ceiling 1 mg/m ³ Ceiling	0.1 ppm Ceiling	0.1 ppm STEL	0.1 ppm Ceiling 1.0 mg/m ³ Ceiling
Hydrochloric Acid	7647-01-0	2 ppm Ceiling 3 mg/m ³ Ceiling	2 ppm Ceiling	2 ppm Ceiling	5 ppm Ceiling 7.5 mg/m ³ Ceiling

Australia and Mexico

Component	CAS No	Australia	Mexico
Water	7732-18-5	None	None
Potassium Iodide	7681-11-0	None	None
Iodine	7553-56-2	None	0.1 ppm Ceiling 1 mg/m ³ Ceiling
Hydrochloric Acid	7647-01-0	5 ppm Peak 7.5 mg/m ³ Peak	5 ppm Ceiling 7 mg/m ³ Ceiling

Appropriate engineering controls

Engineering measures to reduce exposure:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors and mist below their respective threshold limit value.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

- Eye protection:** Goggles
- Skin and body protection:** Long sleeved clothing
Chemical resistant apron
Gloves
- Respiratory protection:** Vapor respirator. Be sure to use an approved/certified respirator or equivalent.
- Hygiene measures:** Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product

9. PHYSICAL AND CHEMICAL PROPERTIES

- | | | |
|---|--|--|
| Physical state:
Liquid | Appearance:
No information available. | Color:
Clear. Brown. |
| Odor:
No information available. | Taste:
No information available. | Formula:
No information available |
| Molecular/Formula weight (g/mole):
No information available | Flammability (solid, gas):
no data available | Flashpoint (°C/°F):
No information available |
| Flash Point Tested according to: | Autoignition Temperature (°C/°F): | |

Not available	No information available	Lower Explosion Limit (%): No information available
Upper Explosion Limit (%): No information available	Melting point/range(°C/°F): No information available	Decomposition temperature(°C/°F): No information available
Boiling point/range(°C/°F): 100°C/ 212°F (Water)	Bulk density: No information available	Density (g/cm3): No information available
Specific gravity: 1.03	pH No information available	Vapor pressure @ 20°C (kPa): No information available
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: Easily soluble in cold water Easily soluble in hot water Easily soluble in diethyl ether Soluble in Methanol Partially soluble in acetone	

10. STABILITY AND REACTIVITY

Reactivity

Reacts violently with strong oxidizers, bromotrifluorides, chlorotrifluorides, fluorine perchlorate, metallic salts. Attacks metals in moist environments. Also incompatible with salts of alkaloids, chloral hydrate, calomel (mercurous chloride), potassium chlorate, tartaric and other acids, oxidants, diazonium salts, charcoal, ozone, strong reducers, alkali metals, metals (brass, aluminum magnesium, zinc, cadmium, copper, tin, nickel, steel), metallic salts, organic materials, light. Potassium Iodide and Fluorine Perchlorate will explode on contact.

(for Potassium Iodide).

Incompatible with liquid chlorine, acetylene, hafnium powder, Tetraamine copper (II) sulfate + ethanol, acetaldehyde, ammonia, salt + ethanol, ammonium hydroxide, methyl alcohol, antimony powder, silver azide, lithium, potassium, polyacetylene, sodium, phosphorous, bromine pentafluoride, fluorine, trioxygen difluoride, oxygen difluoride, magnesium, finely divided (powdered) metals, organic solvents, natural rubber goods, neoprene, plastics (ABS, Acetal (Delrin), CPVC, Epoxy, Polypropylene, NORYL, PPS (Ryton)), zinc, aluminum, alkali metals, sulphur, ammonia, ammonia + potassium, ammonium hydroxide, ammonia solutions, Ammonia + Lithium 1-heptynide, Bromine trifluoride, Bromine pentafluoride, Fluorine, Chlorine trifluoride, reducing agents, iron, ethanol + butadiene + mercuric oxide; ethanol + phosphorous; ethanol + methanol + HgO; foramide + pyridine + sulfur trioxide; formamide; halogens or interhalogens; mercuric oxide; metal carbides; oxygen; pyridine; sodium hydride, metal acetylides (cesium, copper (I), lithium, rubidium), Dipropyl mercury, Titanium (above 113 C.), Cesium Oxide (above 150 C.), various metal acetylides (barium, calcium, strontium, zirconium), various metal carbides. Violent reaction with iodine and aluminum + diethyl ether ... (and titanium (above 113 deg C). Iodine reacts violently with Acetaldehyde, Dipropylmercury, Aluminum + and diethyl ether, Titanium (above 113 C.)

(for Iodine)

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: Incompatible materials.

Incompatible Materials: Oxidizing agents
Reducing agents

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Organic materials
Metals
Acids

Hazardous decomposition products: No information available.

Other Information

Corrosivity: Corrosive in presence of stainless steel (304)
Corrosive in presence of stainless steel (316)
Non-corrosive in presence of glass.
Non-corrosive in presence of aluminum
Non-corrosive in the presence of copper

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure:
Skin. Eyes.

Acute Toxicity

Component Information

Water	
CAS No	7732-18-5

LD50/oral/rat = > 90 mL/kg Oral LD50 Rat
LD50/oral/mouse = No information available
LD50/dermal/rabbit = No information available
LD50/dermal/rat = No information available
LC50/inhalation/rat = No information available
LC50/inhalation/mouse = No information available
Other LD50 or LC50 information = No information available

Potassium Iodide	
CAS No	7681-11-0

LD50/oral/rat = No information available
LD50/oral/mouse = 1862 mg/kg, LDLo
LD50/dermal/rabbit = No information available
LD50/dermal/rat = No information available
LC50/inhalation/rat = No information available
LC50/inhalation/mouse = No information available
Other LD50 or LC50 information = 916 mg/kg, oral, rabbit, LDLo

Iodine	
CAS No	7553-56-2

LD50/oral/rat = 14 g/kg Oral LD50 Rat
LD50/oral/mouse = 1000 mg/kg (RTECS)
22000 mg/kg (Hazardous Substance Data Bank)
LD50/dermal/rabbit = No information available
LD50/dermal/rat = No information available
LC50/inhalation/rat = No information available
LC50/inhalation/mouse = No information available
Other LD50 or LC50 information = 10000 mg/kg LD50 Oral Rabbit

137 ppm 1h LCL inhalation Rat

Hydrochloric Acid	
CAS No	7647-01-0

LD50/oral/rat = 238 - 277 mg/kg Oral LD50 Rat
700 mg/kg (test substance: 31.5% hydrochloric acid solution)
LD50/oral/mouse = No information available
LD50/dermal/rabbit = >5010 mg/kg Dermal LD50Rabbit(Test substance: 31.5% hydrochloric acid solution - from European Chemicals Bureau IUCLID datasheet)
LD50/dermal/rat = > 5010 mg/kg Dermal LD50 = 1.68 mg/L Inhalation LC50 238 - 277 mg/kg Oral LD50
LC50/inhalation/rat = 3124 ppm Inhalation LC50 Rat 1 h
1.68 mg/L Inhalation LC50 1 h
1562 ppm 4 h(for hydrogen chloride)
LC50/inhalation/mouse = 1108 ppm 1 h (hydrogen chloride)
Other LD50 or LC50 information = 900 mg/kg oral LD50 Rabbit (no information on test substance)

Product Information

LD50/oral/rat =
Value - Acute Tox = No information available

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

LD50/dermal/rabbit
Value - Acute Tox = No information available

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

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: Causes skin irritation.

Eye Contact: Causes serious eye irritation.

Inhalation Inhalation of mist or vapors may cause respiratory tract irritation and mucous membrane irritation.

Ingestion Causes gastrointestinal tract irritation with thirst, abdominal pain, nausea, vomiting hypermotility, and diarrhea. It can also cause staining of the mouth, esophagus, lips, mucous membranes, metallic taste. It may also affect behavior (somnolence, dizziness, headache, hallucinations, seizures, depression, stupor, muscle weakness), cardiovascular system (tachycardia, hypotension). Serum-sickness type of hypersensitivity such as fever, arthralgia, lymph node enlargement, and eosinophilia may appear. Thrombotic thrombocytopenic purpura, and fatal periarteritis nodosa attributed to hypersensitivity to iodide has

been described.

Aspiration hazard No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity Skin: May cause reddening of the skin, itching, acne-like eruption of the skin/skin rash, and skin allergies/dermatitis. Eyes: May cause eye irritation and conjunctivitis. Ingestion: It may cause liver damage and affect the brain and behavior/central nervous system with symptoms similar that that of acute ingestion. Furthermore, since it contains iodine, it may cause a reversible reduction in thyroid function (hypothyroidism), nodular goiter, hyperthyroidism, thyrotoxicosis, metabolic disturbances, and may affect the blood (anemia), urinary system/kidneys (kidney damage, hematuria, albuminuria, anuria). Other symptoms of chronic iodine poisoning (Iodism) may include fever, rapid heartbeat, tremor, headache, delirium, stupor, insomnia, salivation, weight loss/loss of appetite, salivation, stomatitis, parotitis, edema of the glottis, diarrhea, gastric irritation, joint pain and swelling. Furthermore chronic ingestion of iodides (in animals) during pregnancy has resulted in fetal deaths, severe goiter and cretinoid appearance of the newborn. Inhalation: May cause disrupted thyroid activity (see ingestion), and chronic irritation of the throat, sneezing, nasal discharge, bronchitis, laryngitis, asthma. It may also affect behavior/central nervous system (see ingestion). Iodine concentrates in the Thyroid during chronic exposure.

Sensitization: May cause sensitization by skin contact.

Mutagenic Effects: May affect genetic material based on animal test data

Carcinogenic effects: Not considered carcinogenic.

Component	CAS No	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Water	7732-18-5	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed
Potassium Iodide	7681-11-0	Not listed	A4 - Not Classifiable as a Human Carcinogen (listed as Iodides)	Not listed	Not listed	Not listed	Not listed
Iodine	7553-56-2	Not listed	A4 Not Classifiable as a Human Carcinogen	Not listed	Not listed	Not listed	Not listed
Hydrochloric Acid	7647-01-0	Monograph 54 [1992]	A4 Not Classifiable as a Human Carcinogen	No information	No information	No information	No information

ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

Reproductive toxicity Suspected of damaging fertility or the unborn child

Reproductive Effects: May cause adverse reproductive effects based on animal data
Developmental Effects: No information available
Teratogenic Effects: No information available

Specific Target Organ Toxicity

STOT - single exposure No information available.
STOT - repeated exposure Causes damage to organs through prolonged or repeated exposure.
Target Organs: Cardiovascular system. Skin. Eyes. Central nervous system. Thyroid.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: Aquatic environment.
Hydrochloric Acid - 7647-01-0
Fish 282 mg/L LC50 *Gambusia affinis* 96 h static 1
Persistence and degradability: No information available
Bioaccumulative potential: No information available.
Mobility in soil No information available
Other adverse effects 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

Component	CAS No	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Water	7732-18-5	None	None	None	None
Potassium Iodide	7681-11-0	None	None	None	None
Iodine	7553-56-2	None	None	None	None
Hydrochloric Acid	7647-01-0	None	None	None	None

14. TRANSPORT INFORMATION

DOT
UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class No information available
Subsidiary Class No information available
Packing group: No information available
Emergency Response Guide Number No information available
Marine Pollutant No data available

DOT RQ (lbs): No information available
Special Provisions No Information available
Symbol(s): No information available
Description: No information available

TDG (Canada)

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class No information available
Subsidiary Risk: No information available
Packing Group: No information available
Marine Pollutant No Information available
Description: No information available

ADR

UN Number Not regulated
Proper Shipping Name: No information available
Transport hazard class(es) No information available
Packing group No information available
Subsidiary Risk: No information available

IMDG

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available
Marine Pollutant No information available

RID

UN Number Not Regulated
Proper Shipping Name: No information available
Transport hazard class(es) No information available
Subsidiary Risk: No information available
Packing group No information available

ICAO (air)

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class No information available
Subsidiary Risk: No information available
Packing Group: No information available

IATA

UN Number Not Regulated
Proper Shipping Name: No information available
Transport hazard class(es) No information available
Subsidiary Risk: No information available
Packing group No information available
Precautionary Statements - Response IF exposed or concerned
Special Provisions No information available

15. REGULATORY INFORMATION

International Inventories

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Component	CAS No	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	China IECSC	Australia AICS	EINECS-No.
Water	7732-18-5	PresentACTIVE	Present KE-35400	Present	Not present	Present	Present	Present 231-791-2
Potassium Iodide	7681-11-0	PresentACTIVE	Present KE-29149	Present	Present (1)-439	Present	Present	Present 231-659-4
Iodine	7553-56-2	PresentACTIVE	Present KE-21023	Present	Not present	Present	Present	Present 231-442-4
Hydrochloric Acid	7647-01-0	PresentACTIVE	Present KE-20189	Present	Present (1)-215	Present	Present	Present 231-595-7

U.S. Regulations

Potassium Iodide

FDA - Food Additives Generally Recognized as Safe (GRAS): 21 CFR 184.1634

FDA - Direct Food Additives 21 CFR 172.375

FDA - 21 CFR - Total Food Additives 100.155, 172.375, 178.1010, 184.1634, 582.80

- List Sourced from EAFUS

Iodine

Massachusetts RTK: Present

New Jersey RTK Hazardous Substance List: 1026

Pennsylvania RTK: Present

Minnesota - Hazardous Substance List: Present

California Directors List of Hazardous Substances: Present

Hydrochloric Acid

Massachusetts RTK: Present

Massachusetts EHS: Present

New Jersey RTK Hazardous Substance List: 1012

New Jersey (EHS) List: 1012 500 lb TPQ

2909 500 lb TPQ

New Jersey - Discharge Prevention - List of Hazardous Substances: Present

New Jersey TCPA - EHS: 15000lbTQ

5000lbTQ

5600lbTQ

2000lbTQ

Pennsylvania RTK: Environmental hazard

Pennsylvania RTK - Environmental Hazard List Present

Minnesota - Hazardous Substance List: Present

New York Release Reporting - List of Hazardous Substances:

5000 lb RQ

100 lb RQ

Louisiana Reportable Quantity List for Pollutants: 5000lbfinal RQAs listed in 40 CFR 117.3 Table 117.3 and 40 CFR 302.4 Table 302.4

2270kgfinal RQAs listed in 40 CFR 117.3 Table 117.3 and 40 CFR 302.4 Table 302.4

5000lbRQAs listed in Louisiana Administrative Code, Title 33, Part 1, Subpart 2, Chapter 39, Subchapter E. Applies to unauthorized emissions based on total mass emitted into or onto all media within any consecutive 24-hour period

1000lbRQAs listed in Louisiana Administrative Code, Title 33, Part 1, Subpart 2, Chapter 39, Subchapter E. Applies to unauthorized emissions based on total mass emitted into the atmosphere

California Directors List of Hazardous Substances: Present

FDA - Food Additives Generally Recognized as Safe (GRAS): 21 CFR 182.1057

FDA - 21 CFR - Total Food Additives 133.129, 155.191, 155.194, 160.105, 160.185, 172.560, 172.892, 182.1057

- List Sourced from EAFUS

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)

Component	CAS No	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Water	7732-18-5	Not Listed	Not Listed	Not Listed	Not Listed
Potassium Iodide	7681-11-0	Not Listed	Not Listed	Not Listed	Not Listed

Iodine	7553-56-2	Not Listed	Not Listed	Not Listed	Not Listed
Hydrochloric Acid	7647-01-0	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Component	CAS No	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 de minimis
Water	7732-18-5	None	None	None	None	None
Potassium Iodide	7681-11-0	None	None	None	None	None
Iodine	7553-56-2	None	None	None	None	None
Hydrochloric Acid	7647-01-0	5000 lb final RQ 2270 kg final RQ	5000 lb EPCRA RQ	None	None	1.0 % de minimis concentration

U.S. TSCA

Component	CAS No	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Water	7732-18-5	Not Applicable	Not Applicable
Potassium Iodide	7681-11-0	Not Applicable	Not Applicable
Iodine	7553-56-2	Not Applicable	Not Applicable
Hydrochloric Acid	7647-01-0	Not Applicable	Not Applicable

Canada

WHMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information:

Component

Water

7732-18-5 (94.7)

Potassium Iodide

7681-11-0 (4)

Iodine

7553-56-2 (1.3)

Hydrochloric Acid

7647-01-0 (0.006)

WHMIS 2015 Hazard Classification

Not a dangerous product according to HPR classification criteria

Specific target organ toxicity - Repeated exposure - Category 1: H372 Causes damage to organs through prolonged or repeated exposure.

Acute toxicity - Dermal - Category 4: H312 Harmful in contact with skin.; Skin corrosion/irritation - Category 2: H315 Causes skin irritation.; Serious Eye Damage/Eye Irritation - Category 2: H319 Causes serious eye irritation.; Specific target organ toxicity - Repeated exposure - Category 1: H372 Causes damage to organs through prolonged or repeated exposure.

Gases under pressure - Liquefied gas: H280 Contains gas under pressure, may explode when heated.; Corrosive to Metals - Category 1: H290 May be corrosive to metals. (potentially corrosive to metals; the supplier should be contacted for more information); Acute toxicity - Inhalation - Category 3: H331 Toxic if inhaled.; Health Hazard Not Otherwise Classified - Category 1: Causes severe damage to the respiratory tract; Skin corrosion/irritation - Category 1: H314 Causes severe skin burns and eye damage.; Serious Eye Damage/Eye Irritation - Category 1: H318 Causes serious eye damage.

Canada Hazardous Products Regulation This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

DSL/NDSL

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Component	CAS No	Canada (DSL)	Canada (NDSL)
Water	7732-18-5	Present	Not Listed
Potassium Iodide	7681-11-0	Present	Not Listed
Iodine	7553-56-2	Present	Not Listed
Hydrochloric Acid	7647-01-0	Present	Not Listed

Component	CAS No	CEPA Schedule I - Toxic Substances
Water	7732-18-5	Not listed
Potassium Iodide	7681-11-0	Not listed
Iodine	7553-56-2	Not listed
Hydrochloric Acid	7647-01-0	Not listed
Component	CAS No	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Water	7732-18-5	Not listed
Potassium Iodide	7681-11-0	Not listed
Iodine	7553-56-2	Not listed
Hydrochloric Acid	7647-01-0	Not listed

EU Classification

EU GHS - SV - CLP 1272/2008

Component	CAS No	EU GHS - SV - CLP (1272/2008)
Water	7732-18-5	
Potassium Iodide	7681-11-0	No information
Iodine	7553-56-2	Acute toxicity - Dermal - Acute Tox. 4: H312 Harmful in contact with skin. (Minimum classification); Acute toxicity - Inhalation - Acute Tox. 4: H332 Harmful if inhaled. (Minimum classification); Hazardous to aquatic environment - acute hazard - Aquatic Acute 1: H400 Very toxic to aquatic life.053-001-00-3
Hydrochloric Acid	7647-01-0	Gases under pressure: H280 Contains gas under pressure, may explode when heated.; Acute toxicity - Inhalation - Acute Tox. 3: H331 Toxic if inhaled. (Minimum classification); Skin corrosion/irritation - Skin Corr. 1A: H314 Causes severe skin burns and eye damage.017-002-00-2

EU - CLP (1272/2008)

R-phrase(s)

S -phrase(s)

Component	CAS No	Classification	Concentration Limits:	Safety Phrases
Water	7732-18-5		No information	
Potassium Iodide	7681-11-0		No information	
Iodine	7553-56-2	Xn; R20/21 N; R50	No information	S2 S23 S25 S61
Hydrochloric Acid	7647-01-0	Hydrogen Chloride	Hydrogen Chloride:	For Hydrogen

		T; R23 C; R35 Hydrochloric Acid: + hydrochloric acid ...% C; R34 - Xi; R37 Concentration Limit(s): C >= 25 % C; R34-37 10 % <= C < 25 % Xi; R36/37/38	0.02%<=C<0.2% Xi;R36/37/38 0.2%<=C<0.5% C;R34 0.5%<=C<1% C;R20-34 1%<=C<5% C;R20-35 5%<=C T;C;R23-35	Chloride: S1/2 S9 S26 S36/37/39 S45 Hydrochloric Acid: S(1/2)-S26-S45
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The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:

Xi - Irritant
Xn - Harmful

Xi



Xn



16. OTHER INFORMATION

Preparation Date: 08/05/2015
Revision date 2/15/2019
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