



Material Safety Data Sheet Hydrochloric Acid Solutions in Isopropanol

Section 1 - Chemical Product and Company Identification

MSDS Name:

Hydrochloric Acid Solutions in Isopropanol

Catalog Numbers:

LC15400, LC15410

Synonyms:

Hydrochloric acid 0.1N in Isopropanol, Hydrochloric acid 0.2N in Isopropanol

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
67-63-0	Isopropyl alcohol	balance
7647-01-0	Hydrochloric acid	0.3 – 0.9%

Section 3 - Hazards Identification

Emergency Overview

Appearance: Clear, colorless liquid

Danger! Flammable liquid. May cause irritation or burns by all exposure routes. May be harmful if swallowed or inhaled. May cause central nervous system depression. May cause liver and kidney damage. May cause adverse reproductive system effects based on animal data.

Target Organs: Eyes, skin, respiratory tract, kidneys, liver, central nervous system.

Potential Health Effects

Eye:

May cause eye irritation or burns.

Skin:

May cause skin irritation or burns. May be absorbed through the skin.

Ingestion:

May cause gastrointestinal irritation with nausea, vomiting, and diarrhea. Ingestion of large amounts may cause central nervous system depression with drowsiness, dizziness, headache, and possible coma.



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Inhalation:

May cause respiratory tract irritation. Inhalation of high concentrations may cause central nervous system depression with headache, dizziness, drowsiness, stupor, incoordination, unconsciousness, coma, and possible death.

Chronic:

May cause dermatitis, skin defatting, and allergic reaction.

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 soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid.

Ingestion:

Get medical aid at once. Give oxygen if respiration is depressed. Do not induce vomiting. If vomiting occurs naturally, keep head lower than hips to prevent aspiration into lungs. If victim is conscious, give 2-4 glasses of water to dilute alkali.

Inhalation:

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

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. Material is lighter than water and a fire may be spread by the use of water. Vapors mixed with air can explode when ignited. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. Move container if possible; avoid breathing vapors or dust.

Extinguishing Media:

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

Autoignition Temperature:

750°F (399°C)

Flash Point:

53°F (127°C)

NFPA Rating:

CAS# 67-63-0: Health- 1, Flammability- 3, Instability- 0

CAS# 7647-01-0: Health- 3, Flammability- 0, Instability- 1

Explosion Limits:

Lower: 2 Upper: 12.7



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Section 6 - Accidental Release Measures

General Information:

Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spills with inert material (vermiculite, sand, fuller's earth) and place in suitable containers labeled for later disposal. Area may be washed down with water. Label reclaimed spill material as flammable. Do not allow vapors to accumulate in drains, sewers, low level enclosures or wells.

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. Use non-sparking tools and equipment.

Storage:

Protect from heat and incompatibles. Store tightly capped. Keep away from heat, sparks, flame, or other sources of ignition.

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
Isopropyl alcohol	200 ppm TWA; 400 ppm STEL	400 ppm TWA; 500 ppm STEL	400 ppm TWA; 500 ppm STEL
Hydrochloric acid	2 ppm Ceiling	50 ppm IDLH	5 ppm Ceiling; 7 mg/m3 Ceiling

OSHA Vacated PELs:

Isopropyl alcohol: 400 ppm TWA; 980 mg/m3 TWA

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.

Respirators:

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



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Section 9 - Physical and Chemical Properties

Physical State:	Clear liquid
Color:	Colorless
Odor:	Solvent odor
pH:	0-1
Vapor Pressure:	4.4 kPa @ 20°C
Vapor Density:	2.07 (Air = 1)
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:	0.8
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, sources of ignition.

Incompatibilities with Other Materials:

Metals, oxidizing agents, alkalis, alcoholic hydrogen cyanide, tetraselenium tetranitride, sodium, potassium permanganate, sulfuric acid, perchloric acid, calcium and uranium phosphide, perchlorates, magnesium boride, phosgene, nitroform, trinitromethane, 2-butanone, hydrogen peroxides, oxygen, oleum, metal alkyls.

Hazardous Decomposition Products:

Hydrogen chloride, chlorine, carbon monoxide, carbon dioxide.

Hazardous Polymerization:

Has not been reported

Section 11 - Toxicological Information

RTECS:

CAS# 67-63-0: NT8050000.

CAS# 7647-01-0: MW4025000.

LD50/LC50:

CAS# 67-63-0:

Oral, mouse: LD50 = 3600 mg/kg

Oral, rat: LD50 = 5045 mg/kg

Skin, rabbit: LD50 = 12800 mg/kg.

CAS# 7647-01-0:

Inhalation, mouse: LC50 = 1108 ppm/1H

Inhalation, rat: LC50 = 3124 ppm/1H

Oral, rabbit: LD50 = 900 mg/kg.



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Carcinogenicity:

CAS# 67-63-0: Not listed as a carcinogen by ACGIH, California Proposition 65, NIOSH, NTP, OSHA, or IARC.

CAS# 7647-01-0: Not listed as a carcinogen by ACGIH, California Proposition 65, NIOSH, NTP, OSHA, or IARC.

Epidemiology:

No information found

Teratogenicity:

No information found

Reproductive:

Adverse reproductive effects have been reported in 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 LC15400	LC15410
Shipping Name:	Flammable liquid, n.o.s.	Flammable liquid, corrosive, n.o.s.
Hazard Class:	3	3, 8
UN Number:	UN1993	UN2924
Packing Group:	PG II	PG II

Section 15 - Regulatory Information

US Federal

TSCA:

CAS# 67-63-0 is listed on the TSCA Inventory.

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

SARA Reportable Quantities (RQ):

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

CERCLA/SARA Section 313:

This material contains Isopropyl alcohol (CAS# 67-63-0, >99%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

This material contains Hydrochloric acid (CAS# 7647-01-0, >1%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.



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OSHA - Highly Hazardous:

CAS# 7647-01-0 is considered highly hazardous by OSHA.

US State

State Right to Know:

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

Hydrochloric acid 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# 67-63-0 is listed on Canada's DSL List.

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

Canada Ingredient Disclosure List:

CAS# 67-63-0 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 21, 1998

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