ISO9001 - 2000 certified

Material Safety Data Sheet

Isopropyl alcohol

Section 1 - Chemical Product and Company Identification

MSDS Name:

Isopropyl alcohol

Catalog Numbers:

LC15750, LC15755, LC15760

Synonyms:

isopropanol, 2-propanol, sec-propanol

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

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	Percent
7732-18-5	Water	balance
67-63-0	Isopropyl alcohol	50-100

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: colourless
Warning! Flammable liquid. May form explosive peroxides. May cause respiratory and digestive tract irritation. Causes eye irritation. May cause skin irritation. May cause central nervous system depression. May cause kidney damage. May cause respiratory and/or cardiac paralysis resulting in suffocation. (Flash Point: 53°F. - for LC15750)
Target Organs: kidneys, central nervous system.

Potential Health Effects

Eye:

Causes irritation, characterized by a burning sensation, redness, tearing, inflammation, and possible corneal injury.

Skin:

May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material. Prolonged and/or repeated contact may cause defatting of the skin and dermatitis. May cause irritation with pain and stinging, especially if the skin is abraded.

Ingestion:

May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause kidney damage. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure.

Inhalation:

Inhalation of high concentrations may cause central nervous system effects characterized by headache, dizziness, unconsciousness and coma. Inhalation of vapor may cause respiratory tract irritation.

Chronic:

Prolonged or repeated skin contact may cause defatting and dermatitis. May cause allergic skin reaction in some individuals.

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 chemical is gone. Get medical aid at once.

Skin:

Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.

Ingestion:

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:

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

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. Vapors can travel to a source of ignition and flash back. Use water spray to keep fire-exposed containers cool. Containers may explode in the heat of a fire. This chemical poses an explosion hazard. Flammable Liquid. May form explosive peroxides. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas.

Extinguishing Media:

Use water spray to cool fire-exposed containers. Water may be ineffective. Do NOT use straight streams of water. For large fires, use dry chemical, carbon dioxide, alcohol-resistant foam, or water spray. For small fires, use carbon dioxide, dry chemical, dry sand, or alcohol-resistant foam. Cool containers with flooding quantities of water until well after fire is out.

Autoignition Temperature:

810°F (432.22°C)

Flash Point:

53°F (11.67°C) - for LC15750

NFPA Rating:

CAS# 7732-18-5: Not published.
CAS # 67-63-0 health-1; flammability-3; reactivity-0

Explosion Limits:

Lower: 2.5 at 79°F Upper: 12.1 at 150°F

Section 6 - Accidental Release Measures

General Information:

Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spills with absorbent (vermiculite, sand, fuller's earth) and place in plastic bags for later disposal. Remove all sources of ignition.

Section 7 - Handling and Storage

Handling:

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Ground and bond containers when transferring material. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Avoid contact with heat, sparks and flame. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

Storage:

Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a tightly closed container. Keep from contact with oxidizing materials. Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Use adequate general or local exhaust ventilation to keep airborne concentrations 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.
Isopropyl alcohol	(400 ppm) TWA;(500ppm) STEL	400 ppm TWA; 980 mg/m3 TWA	400 ppm TWA; 980 mg/m3 TWA;

OSHA Vacated PELs

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

Personal Protective Equipment

Eyes:

Provide an eye-wash fountain in the immediate work area. Do not wear contact lenses when working with chemicals.

Skin:

Wear water impervious gloves, apron, and/or clothing.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Provide local exhaust or process enclosure to meet Permissable Exposure Limits (PEL).

Section 9 - Physical and Chemical Properties

Physical State:	Liquid
Color:	colourless
Odor:	solvent odor
pH:	No information found.
Vapor Pressure:	96 mm Hg
Vapor Density:	2.1 (air=1)
Evaporation Rate:	2.3 (n-butyl acetate=1)
Viscosity:	2.1 cP at 77 F
Boiling Point:	82°C (179.60°F)
Freezing/Melting Point:	-90°C (-130.00°F)
Decomposition Temperature:	No information found.
Solubility in water:	No information found.
Specific Gravity/Density:	0.78 (water=1)
Molecular Formula:	C3H8O
Molecular Weight	60.0554

Section 10 - Stability and Reactivity

Chemical Stability:

Stable. This material may be sensitive to peroxide formation.

Conditions to Avoid:

Incompatible materials, light, ignition sources.

Incompatibilities with Other Materials

This material has been reported to be susceptible to autoxidation and therefore should be classified as peroxidizable..

Hazardous Decomposition Products

Carbon monoxide, carbon dioxide, acrid smoke and fumes.

Hazardous Polymerization

Has not been reported.

Section 11 - Toxicological Information

RTECS:

CAS# 7732-18-5: ZC0110000.
CAS# 67-63-0: NT8050000.

LD50/LC50:

CAS# 7732-18-5:
Oral, rat: LD50 = >90 mL/kg.
CAS# 67-63-0:
Oral, mouse: LD50 = 3600 mg/kg
Oral, rabbit: LD50 = 6410 mg/kg
Oral, rat: LD50 = 5045 mg/kg
Skin, rabbit: LD50 = 12800 mg/kg.

Carcinogenicity:

CAS# 7732-18-5: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.
CAS# 67-63-0
ACGIH: Not listed.
California: Not listed.
NIOSH: Not listed.
NTP: Not listed.
OSHA: Not listed.
IARC: Group 3

Epidemiology:

Teratogenicity:

Reproductive:

Mutagenicity

Neurotoxicity

Section 12 - Ecological Information

Ecotoxicity:

Acute aquatic effects: Fathead minnow: LC50 =1000 mg/L/96 Hr. Golden orfe: LC50 = 8970 mg/L/48 Hr. goldfish: LC50 = GT5000 mg/L/24 Hr.

Environmental:

This chemical has a low potential to affect aquatic organisms, secondary waste treatment microorganisms, and the germination and growth of some plants. It is readily biodegradable and is not expected to persist in an aquatic environment. It is not likely to bioconcentrate.

Physical:

None

Other:

None

Section 13 - Disposal Considerations

Dispose of in accordance with federal, state, and local regulations.

Section 14 - Transport Information

US DOT

	60 - 100% V/V Isopropanol	**5 - 59% V/V Isopropanol**
Shipping Name:	Isopropanol	Flammable liquid, n.o.s. (Isopropanol)

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Hazard Class:	3	3
UN Number:	UN1219	UN1993
Packing Group:	PG II	PG III

Section 15 - Regulatory Information

US Federal

TSCA

CAS# 7732-18-5 is listed on the TSCA Inventory.
CAS# 67-63-0 is listed on the TSCA Inventory.

SARA Reportable Quantities (RQ)

None of the components are on this list.

CERCLA/SARA Section 313

This material contains Isopropyl alcohol (CAS# 67-63-0, 70-100%),which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

OSHA - Highly Hazardous

None of the components are on this list.

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.

California Regulations

European/International Regulations

Canadian DSL/NDSL

CAS# 7732-18-5 is listed on Canada's DSL List.
CAS# 67-63-0 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# 67-63-0 is listed on Canada's Ingredient Disclosure List.

Section 16 - Other Information

MSDS Creation Date: October 28, 1997
Revision Date: February 19, 2004