MEDICAL CHEMICAL CORPORATION
SINCE 1954

SDS for Isopropanol
Catalog # 104B

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Section I - Product Identification

Product: isopropanol. It is common usage to refer to this as “99% isopropanol.” In reality the concentration of isopropanol is typically greater than 99.5%.

Intended use: Used as a general laboratory reagent.

Uses advised against: Not for consumer use.

Country of origin: United States.

Manufacturer Identification

Medical Chemical Corp.
19430 Van Ness Ave.
Torrance, CA 90501

Customer Service: Phone (310)787-6800
Email. Customerservice@med-chem.com
FAX (310)787-4464

Emergency Telephone Number

CHEMTREC Emergency Response Telephone Number: (800)424-9300. Note: The CHEMTREC phone number is only for emergencies involving spills, leaks, fire, exposure or accident. Please direct all other inquiries to our customer service phone number.

Section II - Hazard Identification

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

Flammable liquid: Category 2 (H225). Danger: Highly flammable liquid and vapor.
Eye damage/eye Irritation: Category 2A (H319). Warning: Causes serious eye irritation.
Acute toxicity (Oral): Category 4 (H301). Toxic if swallowed.
Acute toxicity (Inhalation): Category 4 (H331). Toxic if inhaled.
Specific target organ toxicity: Category 3 (H336): May cause drowsiness or dizziness

Signal word: Danger

Hazard statements

According to the harmonized classification and labeling approved by the EU, this substance is a highly flammable liquid and vapor, causes serious eye irritation and may cause drowsiness or dizziness. In case of skin contact remove all contaminated clothing. In case of fire, use fire extinguishers approved for alcohol fires.

Precautionary statements

P210 Keep away from heat, sparks, open flames and hot surfaces. No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilating/lighting equipment.
P242 Use only non-sparking tools.
P243 Take precautions against static discharge.
P261: Avoid breathing fumes, mist, vapors or spray.
P264+P265: Wash hands thoroughly after handling. Do not touch eyes.
P271: Use only outdoors or in a well-ventilated area.
P280 Wear protective clothes and eye protection.

Safety Ratings

Health: Hazardous *Flammability*: Highly flammable *Reactivity*: None *Contact*: Slight
Recommended safety equipment: safety goggles, lab coat and proper gloves
Storage: Keep cool, away from sources of ignition in a well ventilated area.

NFPA Ratings

Health = 1. Can cause significant irritation.
Flammability = 4. Will vaporize and readily burn at normal temperatures.
Reactivity = 0. Normally stable, even under fire conditions.

Potential Health Effects

The toxicology of this compound has not been completely examined. It is presumed that the toxicity of this item is similar to other aliphatic alcohols. Vapors cause mild irritation of eyes and upper respiratory tract; high concentrations may be anesthetic. Liquid irritates eyes and may cause injury.

Inhalation: Alcohols are absorbed through the mucous membranes and will produce irritation as well as the same effects as ingestion.

Ingestion: Inhalation will produce CNS disturbance, dizziness, photophobia, headache, stupor, coma and death.

Skin contact: Usually harmless to skin. Repeated contact may cause irritation and flaking.

Eye contact: May be irritating.

Chronic Exposure: Unknown.

Aggravation of preexisting conditions: Impaired kidney and liver function may be aggravated by exposure to alcohols. Preexisting eye, skin, and respiratory conditions may also be aggravated.

Section III - Composition/Information on Components

Ingredients	CAS #	EC/List #	%w/w
Isopropanol	67-63-0	200-661-7	99 - 100%

Section IV - First Aid Measures

General Advice: Contact a doctor if symptoms persist

Inhalation: Remove from source of exposure and get medical attention for any breathing difficulty.

Ingestion: Do not induce vomiting. Aspiration isopropanol into the lungs may produce death. Get immediate medical attention even if symptoms improve.

Skin Contact: In case of skin contact get medical advice if irritation develops.

Eye Contact: In case of eye contact remove contact lenses if easily done. Flush thoroughly with water and get medical attention.

Section V - Fire Fighting Measures

Fire Extinguishing Media: Alcohol foam, carbon dioxide or dry chemical. Water is ineffective against alcohol fires but may be used to cool adjacent containers.

Specific Hazards: Risk of vapor traveling to source of ignition and flashing back. Risk of exploding containers when heated. Vapor mixes easily with air and may form explosion risk.

Special information: Pyrolysis will release toxic carbon monoxide, formaldehyde and methanol.

S*pecial protective gear and precautions*: Self contained breathing apparatus and protective gear recommended.

Section VI - Accidental Release Measures

Use personal protective gear, remove all sources of ignition, absorb with a suitable absorbent and dispose. Take precautions against static ignition. Should not be released into the environment.

Section VII - Handling and Storage

P403+P233+P102; Store in a well-ventilated place. Keep container tightly closed. Store away from open flames or other sources of ignition. Keep out of reach of children.

Section VIII - Exposure Control/Personal Protection

Component	ACGIH TLV	OSHA PEL	NIOSH	NIOSH IDLH
Isopropanol	TWA: 200 ppm STEL: 400 ppm	400 ppm	TWA 400 ppm	2000 ppm

Legend

ACGIH: American Conference of Governmental Industrial Hygienists.
OSHA: Occupational Safety and Health Administration.
NIOSH: National Institute for Occupational Safety and Health.
IDLH: Immediately dangerous to life or health.

Ventilation System: Local exhaust such as explosion proof chemical fume hoods are recommended. When required, Refer to the ACGIH document, “Industrial Ventilation, a Manual of Recommended Practices” for details about ventilation.

Personal Respirator: Usually not required. In case of emergency, or when exposure levels are unknown, use a p*ositive pressure, full face piece, air supplied respirator.*

Skin protection: Usually not required.

Eye Protection: Laboratory safety goggles or similar products are recommended as part of good laboratory practice.

Section IX - Physical and Chemical Properties

Appearance and Odor: A clear, colorless and volatile liquid with a sweet odor. Has the characteristic odor of isopropanol.

Flash point: 12 °C (53 °F) TCC

Flammable Limits : LEL 2% UEL 12%

Autoignition temperature: 400 °C
Boiling point range: No data
Density: 0.786 g/ml @ 20 °C
Vapor pressure (mm Hg): 33 @ 20 °C
Melting point: -90 °C
Odor threshold: 610 ppm
Vapor Density (air = 1): 2.1
Viscosity: 2.04 mPa at 25 °C

Boiling Point: 181 °F (82 °C) @ 1 atm
Decomposition temperature: No data
pH: Not applicable
Evaporation Rate (n-Butyl alcohol = 1): 1.7
Partition coefficient: No data
Solubility: Infinitely miscible with water
Vapor pressure: 33 mm @ 68 °F
Volatile organic carbon (VOC): 785 g/l

Section X - Stability and Reactivity

Stability: Stable under normal conditions.

Hazardous Decomposition Products: Nothing unusual.

Hazardous polymerization: Will not occur.

Incompatibilities: Strong oxidizers, acetaldehyde, chlorine, ethylene oxide, acids, isocyanates

Conditions to avoid: Heat, flame and sources of ignition.

Section XI - Toxicological Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Isopropanol	>4700 mg/kg (Rat)	13,000 mg/kg (Rabbit	19,000 ppm/8h (Rat)

Cancer lists

Ingredient	*Known Carcinogenicity?*	*NTP?*	*Anticipated?*	*IARC Category*
Isopropanol	no	no	no	3

Section XII - Ecological Information

Isopropanol evaporates quickly and are not expected to bioaccumulate. The material is removed from the air by dry and liquid adsorption.

Environmental Fate: Biodegradable
Soil Mobility: Unknown

Environmental Toxicity: Low environmental toxicity.

For isopropanol

Toxicity to freshwater fish (blue gill):LC50 = > 9640 mg/l, 96 h
Toxicity to invertebrates (water flea): EC50 = 1000 mg/l, 48 h
Toxicity to freshwater algae (Pseudokirchneriella subcapitata): EC50 = >1000 mg/l, 72 h

Section XIII - Disposal Considerations

Incineration at a licensed chemical disposal facility is the preferred disposal method. Local governments often restrict the amounts of isopropanol and other flammable liquids that may be flushed down the drain. In general, the effluent exiting the building must not be flammable. Dispose of contents and container in accord with all federal, state and local regulations.

Section XIV - Transportation Information

Bottles smaller than 32 Fl. Oz. are eligible to be shipped under limited quantity exemptions [49 CFR section 173.150(b)(2), 173.150(C) and IATA Y341].

DOT
Proper shipping name: Isopropanol
Hazard Label: Flammable liquid
Hazard Class: 3 *Packaging Group*: II
UN Number: UN1219

IATA
Proper shipping name: Isopropanol
Hazard Label: Flammable liquid
Hazard Class: 3 *Packaging Group*: II
UN Number: UN1219

IMDG
Proper shipping name: Isopropanol
Hazard Label: Flammable liquid
Hazard Class: 3 *Packaging Group*: II
UN Number: UN1219 EMS-No: F-E, S-D

Section XV - Regulatory Information

Chemical Inventory Status

Ingredient	*TSCA*	*EC*
Isopropanol	Yes	Yes

Federal and State Regulations

	SARA 302		*SARA 313*		*RCRA*	*TSCA*	
Ingredient	*RQ*	*TPQ*	*List*	*Category*	*261.33*	*8(D)*	*Ca. Prop 65*
Isopropanol	*No*	*No*	*Yes*	*No*	*No*	*No*	*No*

Chemical Weapons Convention: No TSCA 12(b): No CDTA: Yes

SARA 311/312

Acute:	Yes
Chronic:	No
Fire:	Yes
Pressure:	No
Reactivity:	No

Section XVI - Other Information

This information is believed to be correct at the time of publication but is not guaranteed as such, nor does it purport to be all inclusive. Medical Chemical Corp. assumes no liability for the accuracy or completeness of the information. The user assumes all responsibility for compliance with federal, state and local laws.

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