

# Safety Data Sheet

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## Section 01 Identification

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<b>Product Identifier</b>	Isopropyl Alcohol 99.9%
<b>Other Means of Identification</b>	Isopropanol, 2-propanol, IPA, propan-2-ol
<b>Product Use and Restrictions on Use</b>	Disinfection, sterilization, and general antiseptic.
<b>Initial Supplier Identifier</b>	Rapid Protectant 219 Connie Crescent Unit 10 Concord ON L4K1L4 Phone 1888-964-2180 <a href="https://rapidprotectant.ca">https://rapidprotectant.ca</a>

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## Section 02 Hazard Identification

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### Physical Hazards

Flammable liquid Category 2

### Health Hazards

Serious eye damage / eye irritation Category 2

Specific target organ toxicity - single exposure Category 3

### Signal Word

Danger

### Hazard Statements

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

### Pictograms



### Precautionary Statements

## Prevention

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P233 Keep container tightly closed.
- P240 Ground and bond container and receiving equipment.
- P241 Use explosion-proof electrical, ventilating, and lighting equipment.
- P242 Use non-sparking tools.
- P243 Take action to prevent static discharges.
- P261 Avoid breathing vapours, fumes, or mists.
- P264 Wash affected body parts thoroughly after handling.
- P271 Use only outdoors or in a well-ventilated area.
- P280 Wear protective gloves, protective clothing, eye protection, face protection

## Response

- P303 P361 P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
- P304 P340 P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell.
- P305 P351 P338 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 or attention.

## Storage

- P403 Store in a well-ventilated place.
- P233 Keep container tightly closed.
- P235 Keep Cool.
- P405 Store locked up.

## Disposal

- P501 Dispose of contents / container in accordance with all federal, provincial and / or local regulations including the Canadian Environmental Protection Act.

## Hazards Not Otherwise Classified

Not available

## Supplemental Information

Not available

## Section 03 Composition / Information on Ingredients

### Hazardous Ingredients:

Chemical name	Common name(s)	CAS number	Concentration (w/w%)
2-Propanol	Isopropanol	67-63-0	≥99.9%

## Section 04 First-Aid Measures

### Description of necessary first-aid measures

- Inhalation** Eliminate all ignition sources if safe to do so. Take precautions to ensure your own safety before attempting a rescue (wear appropriate protective equipment, use the buddy system). Remove source of exposure or move person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell.

<b>Ingestion</b>	Get medical advice / attention if you feel unwell or are concerned.
<b>Skin contact</b>	Take off immediately contaminated clothing, shoes and leather goods. Rinse skin with lukewarm, gently flowing water / shower for 15 minutes. Store contaminated clothing under water and wash before re-use or discard.
<b>Eye contact</b>	Remove source of exposure or move person to fresh air. Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for 15 to 20 minutes. Take care not to rinse contaminated water into the unaffected eye or onto the face. If eye irritation persists: Get medical advice / attention.

## **Most important symptoms and effects, both acute and delayed**

<b>Inhalation</b>	May cause drowsiness or dizziness.
<b>Ingestion</b>	May cause discomfort or nausea.
<b>Skin contact</b>	May cause transient skin irritation and dryness
<b>Eye contact</b>	Causes serious eye irritation.
<b>Further information</b>	For further information see Section 11 Toxicological Information.

## **Section 05 Fire Fighting Measures**

<b>Suitable extinguishing media</b>	Extinguish fire using extinguishing agents suitable for the surrounding fire.
<b>Unsuitable extinguishing media</b>	Water jets are not recommended in fires involving chemicals.
<b>Specific hazards arising from the chemical</b>	Highly flammable liquid and vapour. In the event of a fire oxides of carbon may be released.
<b>Special protective equipment for fire-fighters</b>	Wear NIOSH-approved self-contained breathing apparatus and chemical-protective clothing.

## **Section 06 Accidental Release Measures**

<b>Personal Precautions / Protective Equipment / Emergency Procedures</b>	Wear appropriate personal protective equipment (See Section 08 Exposure Controls and Personal Protection). Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground and bond container and receiving equipment. Use explosion-proof electrical, ventilating and lighting equipment. Use non-sparking tools. Take action to prevent static discharge. Stay upwind, ventilate area.
<b>Environmental Precautions</b>	Prevent material from entering waterways, sewers or confined spaces. Notify local health and wildlife officials. Notify operators of nearby water intakes.
<b>Methods and Materials for Containment and Cleaning Up</b>	SMALL SPILLS: Stop or reduce leak if safe to do so. Clean up spill with non-reactive absorbent and place in suitable, covered, labeled containers. Flush area with water. Contaminated absorbent material may pose the same hazards as the spilled product. LARGE SPILLS: Contact fire and emergency services and supplier for advice.

## **Section 07 Handling and Storage**

<b>Precautions for Safe Handling</b>	Use proper equipment for lifting and transporting all containers. Use sensible industrial hygiene and housekeeping practices. Wash thoroughly after handling. Avoid all situations that could lead to harmful exposure. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep away from clothing and other combustible materials. Ground and bond container and receiving equipment. Use non-sparking tools. Take action to prevent static discharges. Inspect containers for damage or leaks before handling. If the original label is damaged or missing replace with a workplace label. Have suitable emergency equipment for fires, spills and leaks readily available.
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<b>Conditions for Safe Storage</b>	Store in a cool, dry, well-ventilated area, away from heat sources and incompatible materials. Always store in original labeled container. Keep containers tightly closed when not in use and when empty. Empty containers may contain hazardous residues. Protect label and keep it visible.
<b>Incompatibilities</b>	Oxidizing agents, such as oxygen, hydrogen peroxide, sulphuric and nitric acids, hypochlorites and permanganates.

## Section 08 Exposure Controls and Personal Protection

### Exposure limits

Component	Regulation	Type of listing	Value
Isopropanol	ACGIH	TWA	200 ppm
		STEL/Ceiling	400 ppm

### Engineering controls

<b>Ventilation Requirements</b>	Mechanical ventilation (dilution or local exhaust), process or personnel enclosure and control of process conditions should be provided in accordance with all fire codes and regulatory requirements. Supply sufficient replacement air to make up for air removed by exhaust systems. Use explosion-proof electrical, ventilating, and lighting equipment.
<b>Other</b>	An eye wash bottle or eye wash station should be available, tested, and be in close proximity to the product being handled in accordance with provincial regulations.

### Protective equipment

The following are recommendations only. It is the responsibility of the employer / user to conduct a hazard assessment of the process in which this product being used and determine the proper engineering controls and PPE for their process. Additional regulatory and safety information should be sought from local authorities and, if needed, a professional industrial hygienist.

<b>Eye and face protection</b>	Where there is potential eye or face exposure, tightly fitting chemical goggles are recommended. Contact lenses are not recommended; they may contribute to severe eye injury.
<b>Hand and body protection</b>	Where handling this product it is recommended that skin contact is avoided.
<b>Respiratory protection</b>	In case of insufficient ventilation wear suitable respiratory equipment.

### NIOSH respirator recommendations for: Isopropyl Alcohol

#### Up to: 2000 ppm

- (APF = 25) Any supplied-air respirator operated in a continuous-flow mode
- (APF = 25) Any powered, air-purifying respirator with organic vapor cartridge(s)
- (APF = 50) Any chemical cartridge respirator with a full facepiece and organic vapor cartridge(s)
- (APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted organic vapor cartridge(s)
- (APF = 50) Any self-contained breathing apparatus with a full facepiece.
- (APF = 50) Any supplied-air respirator with a full facepiece

#### Emergency or planned entry into unknown concentrations or IDLH conditions:

- (APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode
- (APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus

## Escape:

(APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted organic vapor cartridge(s)

Any appropriate escape-type, self-contained breathing apparatus

Thermal hazards

Not available

## Section 09 Physical and Chemical Properties

### Appearance

Physical state	Liquid
Colour	Clear, colourless
Odour	Rubbing alcohol
Odour threshold	Not available

### Property

pH	Not available
Melting point / freezing point	-89 °C
Initial boiling point and boiling range	82 °C
Flash point	12 °C
Evaporation rate	Not available
Flammability	Not applicable
Upper flammable limit	13%
Lower flammable limit	2%
Vapour pressure	6.02 kPa @ 25 °C, 4.4 kPa @ 20 °C
Vapour density	2.07
Relative density	Not applicable
Solubility	Miscible in water
Partition coefficient: n-octanol/water	Log kow = 0.05
Auto-ignition temperature	399 °C to 455.6 °C
Decomposition temperature	Not available
Viscosity	Not available
Specific gravity	0.784-0.786 g/mL @ 20 °C
Particle characteristics	Not applicable
Formula	C <sub>3</sub> H <sub>7</sub> OH
Molecular weight	60.096 g/mol

## Section 10 Stability and Reactivity

Reactivity	Highly flammable liquid and vapour.
Stability	This product is stable if stored according to the recommendations in Section 07.
Possibility of hazardous reactions	Hazardous polymerization is not known to occur.
Conditions to avoid	Avoid contact with incompatible materials. Do not heat.

# Safety Data Sheet

Isopropyl Alcohol  
Rapid Protectant

Incompatible materials	Oxidizing agents, such as oxygen, hydrogen peroxide, sulphuric and nitric acids, hypochlorites and permanganates.
Hazardous decomposition products	Thermal decomposition may produce oxides of carbon.

## Section 11 Toxicological Information

### Acute Toxicity (LD50 / LC50 values)

Component	Route	Species	Value	Exposure time
Isopropyl alcohol	Oral	Rat	5,840 mg/kg bw	
	Dermal	Rabbit	16.4 mL/kg bw	
	Inhalation	Rat	>10,000 ppm	6 hours

### Toxic Health Effect Summary

Chemical characteristics	No known effects
Skin	May cause transient skin irritation and dryness
Ingestion	May cause discomfort or nausea.
Inhalation	May cause drowsiness or dizziness.
Eye contact	Causes serious eye irritation.
Sensitization	This product and its components at their listed concentration have no known sensitizing effects.
Mutagenicity	This product and its components at their listed concentration have no known mutagenic effects.
Carcinogenicity	This product and its components at their listed concentration have no known carcinogenic effects.
Reproductive toxicity	This product and its components at their listed concentration have no known reproductive effects.
Specific organ toxicity	May cause drowsiness or dizziness.
Aspiration hazard	Not available
Synergistic materials	Not available

## Section 12 Ecological Information

### Ecotoxicity

Component	Type	Species	Value	Exposure Time
Isopropyl alcohol	LC50	Fathead minnow	9,640 mg/L	96 hours
	EC50	Water flea	>10,000 mg/L	48 hours
	EC10	Freshwater alga	1,800 mg/L	7 days

Biodegradability	The domestic substance list categorizes isopropyl alcohol as persistent.
Bioaccumulation	The domestic substance list categorizes isopropyl alcohol as non-bioaccumulative.
Mobility	This product is water soluble, is not predicted to adsorb to soil and may contaminate ground water.
Other adverse effects	Not available

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**Section 13 Disposal Considerations**

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<b>Waste From Residues / Unused Products</b>	Dispose in accordance with all federal, provincial, and local regulations including the Canadian Environmental Protection Act.
<b>Contaminated Packaging</b>	Do not remove label, follow label warnings even after the container is empty. Empty containers should be recycled or disposed of at an approved waste handling facility.

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**Section 14 Transport Information**

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<b>UN number</b>	UN1219
<b>UN proper shipping name and description</b>	ISOPROPANOL
<b>Transport hazard class(es)</b>	3
<b>Packing group</b>	II
<b>Excepted quantities</b>	1 L
<b>Environmental hazards</b>	Not listed as a marine pollutant under Canadian TDG Regulations, schedule III.
<b>Special precautions</b>	No special provisions
<b>Transport in bulk</b>	ERAP index: Not available
<b>Additional information</b>	MARPOL 73/78 and IBC Code:
	This product is not listed in Chapter 17 of the IBC Code.
	Secure containers (full or empty) during shipment and ensure all caps, valves, or closures are secured in the closed position.

**TDG PRODUCT CLASSIFICATION:** This product has been classified on the preparation date specified at section 16 of this SDS, for transportation in accordance with the requirements of part 2 of the Transportation of Dangerous Goods Regulations. If applicable, testing and published test data regarding the classification of this product are listed in the references at section 16 of this SDS.

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**Section 15 Regulatory Information.**

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**NOTE: THE PRODUCT LISTED ON THIS SAFETY DATA SHEET HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CANADIAN HAZARDOUS PRODUCTS REGULATIONS. THIS SAFETY DATA SHEET CONTAINS ALL INFORMATION REQUIRED BY THOSE REGULATIONS.**

All components of this product appear on the domestic substance list.

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**Section 16 Other Information**

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Date of latest revision: January 10, 2023

**Note:** The responsibility to provide a safe workplace remains with the buyer / user. The buyer / user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the buyer / user to comply with all applicable laws and regulations regarding handling, using, reselling and shipping this product.

**Attention: Receiver of the chemical goods / SDS coordinator**

As part of our commitment to the RDC Responsible Distribution® initiative, Rapid Protectant and its associated companies require, as a condition of sale, that you forward the attached Safety Data Sheet(s) to all affected employees, customers, and end-users. Rapid Protectant will send any available supplementary handling, health, and safety information to you at your request.

If you have any questions or concerns please call our customer service center.

**References:**

- 1) CHEMINFO
- 2) TOXNET
- 3) eChemPortal
- 4) ECHA
- 5) Transportation of Dangerous Goods Canada
- 6) HSDB
- 7) PAN