Safety Data Sheet

Section 01 Identificatic n

Product Identifier	Isopropyl Alcohol 99.8%
Other Means of Identification	Isopropanol, 2-propanol, IPA, propan-2-ol
Product Use and Restrictions on Use	For commercial use
Initial Supplier Identifier	Steveston Chemical Solutions Ltd. 2060 Viceroy Place Richmond, BC. Canada V6V 1Y9 Phone: 604 831 5865

Emergency Poison Phone Numbers by Province

Alberta: 1-800-332-1414	Nunavaut: 1-866-913-7897
British Columbia: 1-800-567-8911	Ontario: 1-800-268-9017
Manitoba: 1-855-776-4766	Prince Edward Island: 1-800-565-8161
New Brunswick: 911	Quebec: 1-800-463-5060
Newfoundland & Labrador: 1-866-727-1110	Saskatchewan: 1-866-454-1212

Section 02 Hazard Identification

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 P337 P313 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	>99.8%

Section 04 First-Aid Measures

Description of necessary first-aid measures

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

Ingestion Get medical advice / attention if you feel unwell or are concerned.

Skin contact	Take off immediately contaminated clothing, shoes and leather goods. Rinse skin with lukewarm, gently flowing water / shower for Store contaminated clothing under water and wash before re-use or discard.
Eye contact	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

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

Section 05 Fire Fighting Measures

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

Section 06 Accidental Release Measures

Personal Precautions / Protective Equipment / Emergency Procedures	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. Uses non-sparking tools. Take action to prevent static discharge. Stay upwind, ventilate area.
Environmental Precautions	Prevent material from entering waterways, sewers or confined spaces. Notify local health and wildlife officials. Notify operators of nearby water intakes.
Methods and Materials for Containment and Cleaning Up	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

Precautions for Safe Handling	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.

Conditions for Safe Storage	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.
Incompatibilities	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

Ventilation Requirements	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.
Other	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.

Eye and face protection	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.
Hand and body protection	Where handling this product it is recommended that skin contact is avoided.
Respiratory protection	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
Formula	C_3H_7OH
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.
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 algea	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

Section 13 Disposal Considerations

Waste From Residues / Unused Products	Dispose in accordance with all federal, provincial, and local regulations including the Canadian Environmental Protection Act.
Contaminated Packaging	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.

Section 14 Transport Information

UN number	UN1219
UN proper shipping name and description	ISOPROPANOL
Transport hazard class(es)	3
Packing group	II
Excepted quantities	1 L
Environmental hazards	Not listed as a marine pollutant under Canadian TDG Regulations, schedule III.
Special precautions	No special provisions
Transport in bulk	ERAP index: Not available MARPOL 73/78 and IBC Code: This product is not listed in Chapter 17 of the IBC Code.
Additional information	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.

Section 15 Regulatory Information.

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.

Section 16 Other Information

Date of latest revision: February 17, 2021

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

References:

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