

Isopropyl Alcohol

SECTION 1. IDENTIFICATION

Product Identifier	Isopropyl Alcohol
Other Means of Identification	2-Propanol, sec-Propyl alcohol, Isopropanol
Product Code(s)	PR3210, PR3211, PR3220, PR3221, PR3222, PR3235
Product Family	Organic
Recommended Use	Laboratory and production usage.
Restrictions on Use	None known.
Supplier Identifier	Alphachem Limited, 2485 Milltower Court, Mississauga, Ontario, L5N 5Z6, (905) 821-2995
Emergency Phone No.	CANUTEC CANADA, 613-996-6666, 24 Hours
SDS No.	0018

SECTION 2. HAZARD IDENTIFICATION

Classified according to Canada's Hazardous Products Regulations (WHMIS 2015).

Classification

Flammable liquid - Category 2; Eye irritation - Category 2A; Specific target organ toxicity (single exposure) - Category 3

Label Elements



Signal Word:
Danger

Hazard Statement(s):

Highly flammable liquid and vapour.
Causes mild skin irritation.
Causes serious eye irritation.
May cause drowsiness or dizziness.

Precautionary Statement(s):

Keep away from flames and hot surfaces. – No smoking.
Avoid breathing dust/fume/gas/mist/vapours/spray.
Wash thoroughly after handling.
Call a POISON CENTRE or doctor if you feel unwell.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.

Other Hazards

None known.

Product Identifier: Isopropyl Alcohol

Date of Preparation: July 08, 2015

Page 01 of 06

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	%	Other Identifiers
Isopropyl Alcohol	67-63-0	> 99	2-Propanol, Sec-Propyl Alcohol, Isopropanol

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

Move to fresh air. Keep at rest in a position comfortable for breathing.

Skin Contact

Rinse with lukewarm, gently flowing water for 5 minutes. Immediately call a Poison Centre or doctor.

Eye Contact

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. Take care not to rinse contaminated water into the unaffected eye or onto the face. If eye irritation persists, get medical advice or attention.

Ingestion

Never give anything by mouth if person is rapidly losing consciousness, or is unconscious or convulsing. Do not induce vomiting. Immediately call a Poison Centre or doctor. Rinse mouth with water.

First-aid Comments

Get medical advice or attention if you feel unwell or are concerned. Some of the first-aid procedures recommended here require advanced first-aid training.

Most Important Symptoms and Effects, Acute and Delayed

If inhaled: symptoms may include coughing, choking, shortness of breath, difficult or rapid breathing and wheezing. If on skin: may cause mild irritation. If in eyes: may cause moderate to severe irritation. If swallowed: can harm the nervous system. Symptoms may include headache, nausea, dizziness, drowsiness and confusion. A severe exposure can cause unconsciousness. Blood function tests may show abnormal results.

Immediate Medical Attention and Special Treatment

Target Organs

Blood vessels, eyes, nervous system, respiratory system, skin.

Special Instructions

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Medical Conditions Aggravated by Exposure

Blood conditions, nervous system conditions, eye conditions, respiratory conditions.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Carbon dioxide, dry chemical powder, appropriate foam, water spray or fog.

Unsuitable Extinguishing Media

Water is not effective for extinguishing a fire. It may not cool product below its flash point.

Specific Hazards Arising from the Product

Flash back possible over considerable distance. Container explosion may occur under fire conditions. In a fire, the following hazardous materials may be generated: very toxic carbon monoxide, carbon dioxide.

Special Protective Equipment and Precautions for Fire-fighters

Evacuate area. Use extreme caution. Fight fire from a safe distance or a protected location. Approach fire from upwind to avoid hazardous vapours or gases. For a massive fire, immediately evacuate the area and use unmanned hose

Product Identifier: Isopropyl Alcohol

Date of Preparation: July 08, 2015

Page 02 of 06

holder or monitor nozzles.

Fire-fighters may enter the area if positive pressure SCBA and full Bunker Gear is worn.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Evacuate the area immediately. Isolate the hazard area. Keep out unnecessary and unprotected personnel. Eliminate all ignition sources. Use grounded, explosion-proof equipment. Remove or isolate incompatible materials as well as other hazardous materials.

Environmental Precautions

Do not allow into any sewer, on the ground or into any waterway.

Methods and Materials for Containment and Cleaning Up

Contain and soak up spill with absorbent that does not react with spilled product. Eg.: dry sand/earth/vermiculite place used absorbent into suitable, covered, labelled containers for disposal. Flush spill area. Contact emergency services and manufacturer/supplier for advice.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Avoid breathing in this product. Only use where there is adequate ventilation. Prevent skin contact. Avoid release to the environment. Eliminate heat and ignition sources such as sparks, open flames, hot surfaces and static discharge. Post "No Smoking" signs.

Conditions for Safe Storage

Store in an area that is: well-ventilated, out of direct sunlight and away from heat and ignition sources.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Chemical Name	ACGIH TLV®		OSHA PEL		AIHA WEEL	
	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA
Isopropyl Alcohol	200 ppm A4	400 ppm				

Appropriate Engineering Controls

Use local exhaust ventilation and enclosure, if necessary, to control amount in the air. Do not allow product to accumulate in the air in work or storage areas, or in confined spaces. Provide eyewash and safety shower if contact or splash hazard exists.

Individual Protection Measures

Eye/Face Protection

Wear chemical safety goggles and face shield when contact is possible.

Skin Protection

Wear chemical protective clothing e.g. gloves, aprons, boots.

Butyl rubber, nitrile rubber, Viton®, polyethylene, polyvinyl alcohol, neoprene rubber.

Respiratory Protection

Wear a powered air-purifying respirator with an appropriate cartridge.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

Appearance	Colourless liquid.
Odour	Alcoholic
Odour Threshold	Not available
pH	Not available
Melting Point/Freezing Point	-89.5 °C (-129.1 °F) (melting)

Product Identifier: Isopropyl Alcohol

Date of Preparation: July 08, 2015

Page 03 of 06

Initial Boiling Point/Range	82 °C (180 °F)
Flash Point	12.0 °C (53.6 °F) (closed cup)
Evaporation Rate	3.0
Flammability (solid, gas)	Not available
Upper/Lower Flammability or Explosive Limit	12.7% (upper); 2% (lower)
Vapour Pressure	32.4 mm Hg at 20 °C
Vapour Density (air = 1)	Not available
Relative Density (water = 1)	0.785 at 25 °C
Solubility	Soluble in water
Partition Coefficient, n-Octanol/Water (Log Kow)	0.05
Auto-ignition Temperature	425.0 °C (797.0 °F)
Decomposition Temperature	Not available
Viscosity	3.05 centistokes at 20 °C (kinematic); 2.4 centipoises at 20 °C (dynamic)
Other Information	
Physical State	Liquid

SECTION 10. STABILITY AND REACTIVITY

Reactivity

Heating may cause an explosion.

Chemical Stability

Normally stable. Unstable under certain conditions - see Conditions to Avoid.

Possibility of Hazardous Reactions

Reacts violently in the presence of acidic conditions (low pH), heat, high energy sources (e.g. welding arcs), light. May cause a fire or explosion.

Conditions to Avoid

Heat, flames and sparks.

Incompatible Materials

Oxidizing agents, Acid anhydrides, Aluminium, Halogenated compounds, Acids.

Hazardous Decomposition Products

Very toxic carbon monoxide, carbon dioxide.

SECTION 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure

Inhalation; skin contact; eye contact; ingestion.

Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Isopropyl Alcohol	16000 ppm (rat)	5046 mg/kg (rat)	12800 mg/kg (rabbit)

Skin Corrosion/Irritation

Animal tests show mild irritation.

Serious Eye Damage/Irritation

Animal tests show mild irritation.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

A severe exposure can cause unconsciousness. Harmful effects on the liver. May be harmful.

Product Identifier: Isopropyl Alcohol

Date of Preparation: July 08, 2015

Page 04 of 06

Skin Absorption

No information was located.

Ingestion

No information was located.

Aspiration Hazard

No information was located.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

No data available.

Respiratory and/or Skin Sensitization

Not known to be a skin sensitizer.

Carcinogenicity

Chemical Name	IARC	ACGIH®	NTP	OSHA
Isopropyl Alcohol	Group 3	A4	Not Listed	

IARC: Group 3: Not classified as to its carcinogenicity to humans.

This product is or contains a component that is not classified as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

Reproductive Toxicity**Development of Offspring**

No information was located.

Sexual Function and Fertility

No information was located.

Effects on or via Lactation

No information was located.

Germ Cell Mutagenicity

No information was located.

Interactive Effects

No information was located.

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Acute Aquatic Toxicity**

Chemical Name	LC50 Fish	EC50 Crustacea	ErC50 Aquatic Plants	ErC50 Algae
Isopropyl Alcohol	9,640.00 mg/L (Pimephales promelas (fathead minnow); 96-hour)	5,102.00 mg/L (Daphnia magna (water flea))		> 2,000.00 mg/L (Desmodesmus subspicatus (algae); 72-hour)

Persistence and Degradability

No information was located.

Bioaccumulative Potential

No information was located.

Mobility in Soil

No information was located.

Other Adverse Effects

There is no information available.

SECTION 13. DISPOSAL CONSIDERATIONS

Product Identifier: Isopropyl Alcohol

Date of Preparation: July 08, 2015

Disposal Methods

Contact local environmental authorities for approved disposal or recycling methods in your jurisdiction. This product and its container must be disposed of as hazardous waste. Do NOT dump into any sewers, on the ground or into any body of water. Treat waste in an approved waste disposal facility.

SECTION 14. TRANSPORT INFORMATION

Regulation	UN No.	Proper Shipping Name	Transport Hazard Class(es)	Packing Group
US DOT	UN1219	Isopropanol (Isopropyl Alcohol)	3	II

Environmental Hazards Not applicable

Special Precautions Not applicable

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations

Canada

WHMIS 1988 Classification

B2 - Flammable Liquid; D2B - Toxic (Eye irritant)

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all of the information required by the Controlled Products Regulations.

USA

Toxic Substances Control Act (TSCA) Section 8(b)

Listed on the TSCA Inventory.

SECTION 16. OTHER INFORMATION

NFPA Rating **Health - 4** **Flammability - 2** **Instability - 0**

Based on Isopropyl Alcohol

SDS Prepared By Alphachem Limited

Phone No. (905)-821-2995

Date of Preparation July 08, 2015

Date of Last Revision November 11, 2015

Disclaimer The information in this document is offered only as a guide in the safe handling of the above product, and has been prepared from the best information currently available. It is not intended to be all-inclusive and the conditions of use may involve other additional considerations. Since Alphachem Limited cannot anticipate or control the conditions under which the product may be used, it will not be liable for any claims, damages or losses which may result from the use or reliance on any information herein.

Product Identifier: Isopropyl Alcohol

Date of Preparation: July 08, 2015

Page 06 of 06