



Safety Data Sheet

Section 1. Identification		
Product Identifier	Isopropyl Alcohol	Version: 6 Effective Date: 10 July, 2017
Other Means Of Identification	Isopropanol	
Initial Supplier Identifier	Chemfax Products Ltd. 11444 – 42 Street SE Calgary, AB T2C 5C4 Tel: 403-287-2055	
Recommended Use and Restrictions On Use	Industrial solvent. No restrictions	
Product Family	Alcohol	
24 Hour Emergency	Canutec (613) 996-6666	

Section 2. Hazard Identification	
Hazard Classification	 
Physical Hazards	Flammable Liquids - Category 2
Health Hazards	Eye Damage/ Irritation - Category 2A Specific Target Organ Toxicity, (Single Exposure) - Category 3
Signal Word	Danger
Hazard Statement	Highly flammable liquid and vapour. Causes serious eye irritation. May cause respiratory irritation; or may cause drowsiness or dizziness.
Precautionary Prevention Statement	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion proof electrical, ventilating and lighting. Use non-sparking tools. Take action to prevent static discharge. Wear protective gloves, protective clothing, eye and face protection. Wash hands thoroughly after handling. Avoid breathing gas, mist, vapours and spray. Use only outdoors or in a well-ventilated area.
Precautionary Response Statement	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower if on clothes. In case of

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	<p>fire: Use dry chemical, alcohol resistant foam, carbon dioxide to extinguish. 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 attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a doctor if you feel unwell.</p>
Precautionary Storage Statement	Store in a well ventilated place. Keep cool. Keep container tightly closed. Store locked up.
Precautionary Disposal Statement	Dispose of contents/container in accordance with local regulations.
Other Hazards	None

Section 3. Composition / Information on Ingredients

Chemical Name	Common Name or Synonyms	CAS NO. and Other Unique Identifiers	% by weight
Isopropanol	Isopropal alcohol, IPA	67-63-0	100

Section 4. First-Aid Measures

Eye Contact	Flush eyes with water for 15 minutes. Seek medical attention.
Skin Contact	Flush area with water. If irritation persists seek medical attention. Launder clothing before reuse.
Inhalation	Remove victim to fresh air. If there is difficulty breathing, seek immediate medical attention.
Ingestion	Rinse mouth with water if conscious. Do not induce vomiting. Lay victim on left side to prevent aspiration of any vomit. Seek immediate medical attention.
Most Important Symptoms and Effects Both Acute and Delayed	Harmful if swallowed. Narcotic effect. Irritating to eyes, respiratory system and skin.
Immediate Medical Attention and Special Treatment	Treat symptomatically. Symptoms may be delayed.



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Section 5. Fire-Fighting Measures	
Suitable and Unsuitable Extinguishing Media	Dry chemical, alcohol resistant foam, carbon dioxide
Hazardous Combustion Products	Carbon monoxide and dioxide
Specific Hazards Arising From The Product	Vapors may cause a flash fire or ignite explosively. Vapors may travel considerable distance to a source of ignition and flash back. Prevent build-up of vapors or gases to explosive concentrations. Vapor from the solvent may accumulate in container headspace resulting in flammability hazard. Thermal decomposition may release oxides of carbon.
Special Protective Equipment and Precautions For Fire-Fighters	Fire-fighters should wear self-contained breathing apparatus and full protective clothing. Use water spray to cool containers and structures exposed to fire.

Section 6. Accidental Release Measures	
Personal Precautions, Protective Equipment and Emergency Procedures	Gloves (nitrile), coveralls (Nomex), safety glasses
Environmental Precautions	Do not allow product to enter surface drains and watercourses
Methods and Materials For Containment and Clean-Up	Stop leak, soak or pump up spilt material. Place in a suitable container for disposal. Wash area with water to remove residues.

Section 7. Handling and Storage	
Precautions For Safe Handling	Flammable liquid. Handle with care.
Conditions For Safe Storage	Store in a cool dry place away from all sources of ignition. Empty containers may have flammable residues present. Keep container closed when not in use. Ground containers when in use.

Section 8. Exposure Controls / Personal Protection				
Control Parameters	TWA: 8 Hr	STEL: 15 min	Ceiling	IDLH *
Isopropanol	400 ppm	500 ppm		
	CAD AB OEL	CAD AB OEL		
Exposure Controls	Local exhaust ventilation			

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Appropriate Engineering Controls	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. An eye wash and safety shower must be available in the immediate work area. Use explosion-proof ventilation equipment.
Individual Protective Measures	Not normally required under normal conditions of use. If exposure limits are exceeded:
Eye / Face Protection	Safety glasses.
Skin Protection	Gloves (nitrile), coverall (Nomex), and chemical resistant footwear.
Respiratory Protection	Air purifying respirator fitted with organic vapour cartridges must be worn.

Section 9. Physical and Chemical Properties	
Appearance	Clear, colourless liquid
Odour	Strong odour
Odour Threshold	Not available.
pH	Not applicable.
Flash Point	12 °C
Boiling Point and Boiling Range	82.5 °C
Melting Point and Freezing Point	-88.5 °C
Evaporation Rate	7.70 (ethyl ether)
Flammability (solid, gas)	Not applicable
Upper and Lower Flammability or Explosive Limits	12.7 % (V), 2 % (V)
Vapour Pressure	6.05 kPa @ 25 °C
Vapour Density	2.1 (air = 1)
Relative Density	0.789
Solubility	Completely soluble
Partition co-efficient, n-Octanol/Water	0.05
Auto-ignition Temperature	399 °C
Decomposition Temperature	No data
Viscosity	No data

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Section 10. Stability and Reactivity	
Reactivity	No dangerous reaction known under conditions of normal use.
Chemical Stability	Stable
Possibility of Hazardous Reactions	Will not occur
Conditions to Avoid	Naked flames. Sparks and sources of ignition
Incompatible Materials	Acids, aldehydes, alkalis, amines, ethylene oxide, halogenated hydrocarbons, halogens, isocyanates, strong acid, strong oxidising agents. Do not use with aluminum equipment at temperatures above 49 °C.
Hazardous Decomposition Products	Not expected to occur under normal conditions of use.

Section 11. Toxicological Information			
Component Toxicity	LD50 Oral	LD50 Dermal	LC50 Inhalation
Isopropanol	4700–5800 mg/kg	5030–7900 mg/kg	16000 ppm
Likely Routes of Exposure			
Skin:	May cause mild irritation. Prolonged contact may cause dryness, cracking and possible skin burns.		
Eyes:	May cause irritation of the eyes, including stinging, redness and tearing.		
Inhalation:	Inhalation of vapours and mists will cause irritation to the upper respiratory tract.		
Ingestion:	May cause severe irritation of the gastro intestinal tract. Ingestion may cause vomiting, which can lead to aspiration of the material – this can cause lung damage and inflammation of lung tissue.		
Acute Toxicity Estimates (ATE)	LD 50 (Oral, Rat): 5,045 mg/kg LD 50 (Dermal, Rabbit): 12,800 mg/kg		
STOT (Specific Target Organ Toxicity) – Single Exposure	Narcotic effect. Respiratory tract irritation.		
Aspiration Toxicity	May be harmful if swallowed and enters airways.		
STOT (Specific Target Organ Toxicity) – Repeated Exposure	None known.		
Skin Corrosion / Irritation	Prolonged or repeated skin contact may cause drying, cracking, or irritation		
Serious Eye Damage / Irritation	Causes serious eye irritation.		



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Respiratory or Skin Sensitization	Not a skin sensitizer.
Carcinogenicity	No listed.
Reproductive Toxicity	
- Sexual Function and Fertility	No components toxic to reproduction.
- Development of Offspring	No data
- Effects on or via Lactation	No data
Germ Cell Mutagenicity	No data
Interactive Effects	No data
Other Information	Not applicable

Section 12. Ecological Information

Ecotoxicity	Isopropanol: LC50: 5770 – 7450 mg/L (Fathead minnow) 96 hr Flow through LC50: 10,000 mg/L (Water flea) 24 hr Static
Persistence and Degradability	Expected to be readily biodegradable.
Bioaccumulative Potential	No data
Biodegradability	Expected to be completely biodegradable
Mobility in Soil	No data
Other Adverse Effects	The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Section 13. Disposal Considerations

Disposal Considerations	Dispose of contents / container in accordance with local regulations.
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Section 14. Transport Information

UN Number	1219
UN Proper Shipping Name	Isopropanol Solution
Transport Hazard Class(es)	3
Packaging Group	II
Environmental Hazards	Not applicable

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Bulk Transport	Not applicable
Special Precaution	Not applicable
DOT Erg#	129

Section 15. Regulatory Information	
Canada – DSL Inventory	All components of this product are either on the Domestic Substances List (DSL) or Non-Domestic Substances List (NDSL) or exempt
TSCA	All components of this product are either on the Toxic Substances Control Act (TSCA) Inventory List or exempt
Additional Information	None

Section 16. Other Information	
NFPA Rating	Health-2/ Flammability-3/Reactivity-0/Special Hazard-Not applicable
HMIS Rating	Health-2/Flammability-3/Reactivity-0/Personal Protection-See Section 8.
Prepared by:	Chemfax Products Ltd., Technical Department
Date Prepared:	27 September, 2014
Date of Latest Revision:	10 November, 2016
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