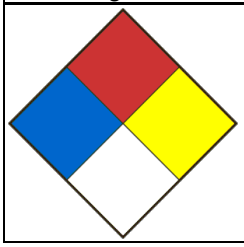
Centre Anti-Poison pour le Québec: (800) 463-5060
Tél. (Qc): (418) 660-8666 / 800-890-8666
Fax. (Qc): (418) 660-8998

SAFETY DATA SHEET

SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier ISOPROPANOL (70%)		**Product Use** Laboratory use	
Chemical formula $(CH_3)_2CHOH$		**Product code** IP-0110	**Molar weight** 60,1
Chemical name / Commercial name / Synonymous ALCOOL ISOPROPYLIQUE, ALCOOL D'ISOPROPYLE, 2-PROPANOL, DIMÉTHYLCARBINOL.			
Supplier's name Laboratoire MAT		**Address-Street** 610, Adanac Street	
City Québec		**Province** Québec	
Postal code G1C 7B7	**Internet** www.labmat.com	**Phone number** 418-660-8666 / 800-890-8666	
Emergency phone	CANUTEC: 613-996-6666	CENTRE ANTI-POISON DU QUÉBEC 800-463-5060	
Date SDS 5/24/2023	**SDS Prepared by** Laboratoire MAT	**E-Mail** labmat@labmat.com	

SECTION 02 - HAZARDS IDENTIFICATION

Classification WHIMS / GHS	Flammable liquids category 2 Serious eye damage/ Eye irritation category 2A Specific target organ toxicity - Single exposure category 3
Signal Word	DANGER
Hazards statements (H)	H225 Highly flammable liquid and vapor. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.
Precautionary statements (P)	P210 Keep away from heat/sparks/open flames/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 precautionary measures against static discharge. P261 Avoid breathing dust / fume / gas / mist / vapors / spray. P264 Wash the areas of the body that have been in contact with the product after handling. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/protective clothing/eye protection/face protection. P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P312 Call a POISON CENTER or doctor/physician if you feel unwell. P337 + P313 If eye irritation persists: Get medical advice/attention. P370 + P378 In case of fire: Use dry sand, a chemical powder, or an anti-alcoholic foam for extinction. P403 + P233 Store in a well-ventilated place. Keep container tightly closed. P403 + P235 Store in a well-ventilated place. Keep cool. P405 Store locked up. P501 Dispose of contents/container in accordance with local / regional / national / international regulations or contact a specialist waste disposal company.
PICTOGRAMS	
Other dangers	NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Signifiant; 4=Extreme)
	**Health** 2 **Fire** 4 **Reactivity** 0 **Special danger**

SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%)
Isopropanol	67-63-0	70

SECTION 04 - FIRST AID MEASURES

Eye contact	Wash eyes with large amounts of water for at least 15 minutes while holding eyelids apart to rinse eyes. If irritation persists, seek medical attention.
Skin contact	Wash skin with plenty of water for at least 15 minutes. Remove soiled clothing. If irritation persists, seek medical attention.
Inhalation	If breathed in, move person into fresh air. If breathing is difficult, give oxygen. Consult a physician.
Ingestion	If the person is conscious, give water to drink. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Consult a physician.
Most important symptoms and effects (acute and delayed)	Main symptoms of high exposure: Skin, eye and respiratory system irritation. Redness. Nausea and vomiting. Vertigo. Headaches. Ref. section 11.
Immediate medical attention and special treatment, if necessary	In case of medical consultation, keep this sheet available.
General advice	Show this safety data sheet to the doctor in attendance.

SECTION 05 - FIREFIGHTING MEASURES

Flammability	Yes
Ignition conditions	Strong oxidizing agents, heat, sparks and open flame. Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	Do not use a heavy water stream.
Hazardous combustion products	Hazardous combustion products formed under fire conditions: Carbon oxides.
Special fire and explosion hazards	Steam can travel a great distance and ignite on sources of ignition such as heaters, electrical appliances, cigarettes, sparks, etc. Containers exposed to fire may explode. May react violently with incompatible products (Ref Section 10).
Special protective equipment and precautions for firefighters	Wear self contained breathing apparatus for fire fighting if necessary.

SECTION 06 - ACCIDENTAL RELEASE MEASURES

Methods and materials for containment and cleaning up / Personnal precautions, protective equipment	Evacuate personnel to safe areas. Cut off all sources of ignition. Absorb the product with sand or vermiculite. Dilute residues with water, clean and rinse. Ensure a good ventilation of the premises. Dispose of residues in a container for disposal of hazardous materials. When handling, wear suitable safety equipment. Use breathing apparatus if necessary. Avoid breathing vapors, mist or gas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

SECTION 07 - HANDLING AND STORAGE

Conditions for safe storage	Keep container tightly closed in a dry and well-ventilated place. Store in a cool, dry place. Keep container tightly closed and store away from strong oxidants, heat, sparks and open flame. Use venting and electrical equipment that is grounded and does not produce ignition sources (sparks). Hygroscopic. Protect from the sun's rays.
Methods of handling	Always open containers slowly to allow any excess pressure to vent. Avoid inhalation of vapor or mist. Use explosion-proof equipment. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

SECTION 08 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Workplace control parameters

Components	CAS-No.	Value	Control parameters	Basis
2-Propanol	67-63-0	TWAEV	200 ppm	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
		STEV	400 ppm	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
		TWA	200 ppm	Canada. British Columbia OEL
		STEL	400 ppm	Canada. British Columbia OEL
		TWAEV	200ppm	Canada. Ontario OELs
		STEV	400ppm	Canada. Ontario OELs
		STEL	400 ppm 984 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		TWA	200 ppm 492 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		TWA	200.000000 ppm	USA. ACGIH Threshold Limit Values (TLV)
		TWA	200 ppm	USA. ACGIH Threshold Limit Values (TLV)
		STEL	400 ppm	USA. ACGIH Threshold Limit Values (TLV)
		STEL	400.000000 ppm	USA. ACGIH Threshold Limit Values (TLV)

Data source	Sigma-Aldrich (Millipore Sigma)
Ventilation	Fan.
Respiratory	If work under the hood is not possible, or if the permissible levels are exceeded, use a mechanical filter / cartridge against NIOSH vapors or a respirator with air supply.
Gloves	Handle with gloves.
Eyes	Safety goggles with safety shutters.
Shoes	Safety shoes.
Clothing	Labcoat. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Engineering control	Have safety showers and eyewash stations in the workplace in case of an emergency and a ventilation system to maintain the level of concentrations in the air below the exposure limit values.

SECTION 09 - PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid.
Appearance	incolore-
Odour	Odeur d'alcool.
Odour threshold	Data not available
pH	Donnée non disponible.
Melting point / Freezing point	-89.5°C (Isopropanol)-
Initial boiling point	82.4°C (Isopropanol)-
Boiling range	Data not available
Flash point	21°C
Evaporation rate	2.83% (Isopropanol)-
Flammability	Yes
Lower flammable / Explosive limit	2.5%V/V (Isopropanol)-
Upper flammable / Explosive limit	12%V/V (Isopropanol)-
Vapour pressure	43.2hPa(32.4 mm-Hg) à 20 °C / 58.7 hPa (44.0 mmHg) à 25.0 °C (Isopropanol)-
Solubility	Miscible avec l'eau en toutes proportions. Miscible avec l'alcool, chloroforme, benzène et éther, insoluble dans solution saline.
Vapour density	2.1 (Air=1) (Isopropanol)-
Relative density	0.876g/ml à 25°C
Partition coefficient water/n-octanol	Log Pow: 0.05 (Isopropanol)-
Auto-ignition temperature	400-456°C (Isopropanol)-
Decomposition temperature	Data not available
Viscosity	2.038 mpas @ 25°C (Isopropanol)-

SECTION 10 - STABILITY AND REACTIVITY

Reactivity	Flammable product, may ignite with source of ignition, if temperature above flash point. May ignite on contact with oxidants.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	Vapors may form explosive mixture with air. Highly flammable liquid and vapors. May react violently with incompatible substances.
Conditions of instability (Including sensitivity to shock / static discharge / vibration)	Avoid excessive heat. Heat, flames, sparks. Avoid the accumulation of static electricity. Avoid contact with incompatible materials.
Incompatible material	Strong oxidizing agents (nitric acid, perchloric acid, peroxides, chlorates and perchlorates), acids and acid anhydrides, aluminum, chromium trioxide, cobalt chloride, halogenated elements, oleum, potassium tert-butoxide, heat and moisture.
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions. Carbon oxides.

SECTION 11 - TOXICOLOGICAL INFORMATION

ISOPROPANOL

Routes of exposure	Ingestion, inhalation, skin contact.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	Irritation and may cause inflammation of the conjunctiva.
- Skin	Irritation and dermatitis.
- Inhalation	Irritation of the mucous membranes and respiratory tract. Narcotic effects, cough, dyspnea, headache, dizziness, drowsiness, incoordination, paresthesia, nystagmus, hypotension, respiratory arrest, coma and may result in death.
Acute toxicity (Ingestion)	Irritation of the mucous membranes. Narcotic effects, liver and kidney damage, abdominal pain, cramps, diarrhea, headache, dizziness, drowsiness, confusion, incoordination, paresthesia, nystagmus, nausea and vomiting, acetonuria, acetonemia, convulsions, stupor, hypotension, cardiac arrest, respiratory, coma and can lead to death.
Chronic exposure effects / symptoms	Burning sensation, dermatitis, conjunctivitis, narcotic effects, liver and kidney damage, chest pain, cough, dyspnoea, laryngitis, headache, dizziness, drowsiness, confusion, incoordination, irritability, blurred vision, tremors, sweating, salivation, weight loss and loss of appetite, nausea and vomiting.
DL50 (specify species and route of entry)	LD50 Oral - Rat - 5045 mg/kg LD50 Dermal - Rabbit - 12870 mg/kg
CL50 (specify species and route of entry)	LC50 Inhalation - Rat - 4h - 72600 mg/m3

SUMMARY

Acute exposure effects / Symptoms:	By exposure routes below.
Ingestion	To our knowledge, the product has not been fully evaluated
Inhalation	To our knowledge, the product has not been fully evaluated
Skin	To our knowledge, the product has not been fully evaluated
Eyes	To our knowledge, the product has not been fully evaluated
Chronic exposure effects / Symptoms:	To our knowledge, the product has not been fully evaluated
ETA Mix (Estimated Acute Toxicity)	LD50: 7207 mg/kg -Oral Rat LD50: >10 000 mg/kg -Dermal Rabbit LC50: >50 000 mg/m3- 4h - Inhalation Rat

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity	Isopropanol: Toxicity to fish: LC50 - Pimephales promelas (fathead minnow) - 9640.00 mg/l - 96 h Toxicity to daphnia and other aquatic invertebrates: EC50 - Daphnia magna (Water flea) - 5102.00 mg/l - 24 h
Persistence and degradability	Data not available.
Bioaccumulative potential	No bioaccumulation is to be expected (log Pow <= 4).
Mobility in soil	Data not available.
Other adverse effects	Data not available.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Disposal Method	Dispose of contents / container in accordance with local / regional / national / international regulations / or contact a specialist waste disposal company.
Contaminated Packaging	Dispose of as unused product.

SECTION 14 - TRANSPORT INFORMATION

UN Number	1219
UN Proper shipping name	ISOPROPANOL
Transport hazard class(es)	3 Flammable liquids
Packing group	II
Limited quantity index	1L
ERAP Index	-
Special precautions	-

SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA	Flammable liquids category 2 Serious eye damage/ Eye irritation category 2A Specific target organ toxicity - Single exposure category 3

SECTION 16 - OTHER INFORMATION

Further information

The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. It does not represent any guarantee of the properties of the product. Laboratoire MAT Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.

Last Update: 5/24/2023