

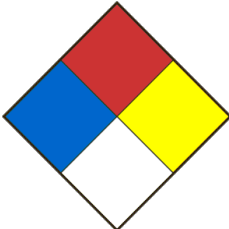


SAFETY DATA SHEET

SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier Hydrochloric acid 0.5%V/V in denaturated ethanol		Product Use Laboratory use	
Chemical formula -		Product code CS-0711	Molar weight
Chemical name / Commercial name / Synonymous -			
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 Lun-Ven 8h-16h	
Emergency phone	418-660-8666 Lun-Ven 8h-16h CENTRE ANTI-POISON DU QUÉBEC 800-463-5060		
Date SDS 10/2/2024	SDS Prepared by Laboratoire MAT	E-Mail labmat@labmat.com	

SECTION 02 - HAZARDS IDENTIFICATION

Classification WHIMS / GHS	Flammable liquids category 2 Specific Target Organ Toxicity - Single exposure category 1 Corrosive to metals-Category 1 Serious eye damage/eye irritation - Serious eye damage category 1 Skin corrosion/irritation - Skin corrosion category 1
Signal Word	DANGER
Hazards statements (H)	H225 Highly flammable liquid and vapor. H370 Causes damage to organs. H290 May be corrosive to metals. H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage.
Precautionary statements (P)	P210 Keep away from heat, sparks, open flames, hot surfaces. — No smoking. P233 Keep container tightly closed. P240 Ground and bond container and receiving equipment. P241 Use explosion-proof equipment. P242 Use only non-sparking tools. P243 Take precautionary measures against static discharge. P260 Do not breathe mists, gases, vapors and other fumes, or the product itself. P264 Wash the areas of the body that have been in contact with the product after handling. P270 Do not eat, drink or smoke when using this product. P280 Wear protective gloves, protective clothing and eye and face protection. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. P308 + P311 IF exposed or concerned: Call a POISON CENTER or a doctor. P321 Specific treatment (see section 4 of the SDS and on this label). P370 + P378 In case of fire: Use water spray or alcohol-resistant foam, or dry powder or carbon dioxide for extinction. P403 + P235 Store in a well-ventilated place. Keep cool. P405 Store locked up. P501 Dispose of contents and container in accordance with local, regional and national regulations, or contact a specialist waste disposal company. P234 Keep only in original container. P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting. 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. P310 Immediately call a POISON CENTER or a doctor. P363 Wash contaminated clothing before reuse. P390 Absorb spillage to prevent material damage. P406 Store in a corrosion resistant container or a container with corrosion resistant liner.
PICTOGRAMS	
Other dangers	NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Significant; 4=Extreme)
	Health 1 Fire 3 Reactivity 1 Special danger

SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%P/P)
Éthanol	64-17-5	89
Méthanol	67-56-1	5
Isopropanol	67-63-0	5
Acide chlorhydrique	7647-01-0	0.3

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. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Consult a physician.
Most important symptoms and effects (acute and delayed)	Main symptoms of high exposure: Skin, eye and respiratory system irritation. Headaches. Vomiting. Nausea. Feeling drunk. Tiredness. Blurry vision. Chemical burns of the skin. The product is a material corrosive. To our knowledge, the chemical, physical and toxicological properties have not been fully investigated. Ref. section 11.
Immediate medical attention and special treatment, if necessary	Treat according to symptoms. Show this sheet to the attending physician. In case of poisoning, the following can be administered as an antidote: Ethyl alcohol. Fomepizole. Folinic acid or folic acid as an adjuvant can be given in case of methanol poisoning.

SECTION 05 - FIREFIGHTING MEASURES

Flammability	Yes
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. Hydrogen chloride gas.
Specific hazards of the dangerous product	May react violently with incompatible products (Ref Section 10).
Special protective equipment and precautions for firefighters	Discard incompatible substances if this can be done without risk. Firefighters should be equipped with standard protective equipment, fireproof clothing, face mask, gloves, protective boots and, where appropriate, self-contained breathing apparatus.

SECTION 06 - ACCIDENTAL RELEASE MEASURES

Methods and materials for containment and cleaning up / Personnel precautions, protective equipment	Evacuate personnel to safe areas. Cut off all sources of ignition. Avoid the accumulation of charges electrostatic. 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. When handling, wear appropriate safety equipment. Use NIOSH cartridge respiratory protection for larger spills. (Reference Section 8 for protective equipment to be used.) Avoid breathing vapors, mist or gas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. Do not let product enter drains.
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SECTION 07 - HANDLING AND STORAGE

Conditions for safe storage	Store in a cool, dry place. Protect from the sun's rays. Keep container tightly closed and store away from heat, water, moisture, and incompatible products. Use venting and electrical equipment that is grounded and does not produce ignition sources (sparks).
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. Wear personal protective equipment when handling. Always ensure good ventilation. This product is corrosive to metals. Do not bottle in a metal container. Apply the usual standard hygiene rules: Wash your hands after use. Do not eat or drink during use.

SECTION 08 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Workplace control parameters

Components	CAS-No.	Value	Control parameters	Basis
Ethanol	64-17-5	TWAEV	1000 ppm 1900 mg/m3	Canada. Ontario OELs
		TWA	1000 ppm 1880mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		VEMP	1000 ppm 1880mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
		STEL	1000 ppm	Canada. British Columbia OEL
		TWA	1000 ppm	Canada. British Columbia OEL
Components	CAS-No.	Value	Control parameters	Basis
Methanol	67-56-1	TWA	200.000000 ppm 262.000000 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
Remarks	Substance may be readily absorbed through intact skin			
	STEL 250.000000 ppm 328.000000 mg/m3 Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)			
	Substance may be readily absorbed through intact skin			
		TWA	200.000000 ppm	Canada. British Columbia OEL
	Contributes significantly to the overall exposure by the skin route.			
		STEL	250.000000 ppm	Canada. British Columbia OEL
	Contributes significantly to the overall exposure by the skin route.			
		TWAEV	200.000000 ppm 262.000000 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
	Skin (percutaneous)			
		STEV	250.000000 ppm 328.000000 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
	Skin (percutaneous)			
		TWA	200.000000 ppm	USA. ACGIH Threshold Limit Values (TLV)
		STEL	250.000000 ppm	USA. ACGIH Threshold Limit Values (TLV)
Components	CAS-No.	Value	Control parameters	Basis
2-Propanol	67-63-0	TWAEV	400 ppm 983 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
		TWAEV	400.000000 ppm 983.000000 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
		TWA	200 ppm	Canada. British Columbia OEL
		TWA	200.000000 ppm	Canada. British Columbia OEL
		STEL	400 ppm	Canada. British Columbia OEL
		STEL	400.000000 ppm	Canada. British Columbia OEL
		TWAEV	200.000000 ppm	Canada. Ontario OELs

		STEV	400.000000 ppm	Canada. Ontario OELs
		STEL	400.000000 ppm 984.000000 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		STEL	400 ppm 984 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		TWA	200.000000 ppm	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
			492.000000 mg/m3	
		TWA	200 ppm 492 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		STEL	500.000000 ppm 1,230.000000 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		TWA	400.000000 ppm 983.000000 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		STEV	500.000000 ppm 1,230.000000 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
		STEV	500 ppm 1,230 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
		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)
Components	CAS-No.	Control parameters	Value	Basis
Hydrochloric acid	7647-01-0	(c)	2 ppm 3 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
Remarks	Occupational exposure limit is based on irritation effects and its adjustment to compensate for unusual work schedules is not required			
		C	2 ppm	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
	A substance which may not be recirculated in accordance with section 108			
		(c)	2 ppm	Canada. Ontario Reg.833
		C	2 ppm	Canada. British Columbia OEL
		C	2 ppm	USA. ACGIH Threshold Limit Values (TLV)

Data source	Sigma-Aldrich (Millipore Sigma) CNESST Worksafebc.com Ontario Regulation 833. Alberta OELs. ACGIH
Ventilation	Fan.
Respiratory	If work under the hood is not possible, or if the permissible levels are exceeded, use NIOSH cartridge respiratory protection, or an air-supplied respirator.
Gloves	Handle with gloves. Suggested material: Nitrile. Butyle. Neoprene. The type, thickness and length of the glove must be chosen according to the use, the concentration of the product, as well as the duration of use. Replace gloves regularly for better protection.
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	Donnée non disponible.
Odour threshold	Data not available
pH	1.
Melting point / Freezing point	Data not available
Initial boiling point	Data not available
Boiling range	Data not available
Flash point	Data not available
Evaporation rate	Data not available
Flammability	Yes
Lower flammable / Explosive limit	Data not available
Upper flammable / Explosive limit	Data not available
Vapour pressure	Data not available
Solubility	Miscible avec l'eau, les alcools.
Vapour density	Data not available
Relative density	0.79g/ml
Partition coefficient water/n-octanol	Data not available
Auto-ignition temperature	Data not available
Decomposition temperature	Data not available
Viscosity	Data not available

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. Acid product, reacts strongly with strong bases. Reacts strongly with metals.
Chemical stability	Stable under recommended storage conditions. Air sensitive. Sensitive to heat.
Possibility of hazardous reactions	Highly flammable liquid and vapors. Vapors may form explosive mixture with air. Keep away from open flames, hot surfaces and sources of ignition. May react violently with incompatible substances.
Conditions to avoid, including static discharge, shock or vibration	Avoid contact with incompatible materials and extreme temperatures. Heat, flames, sparks.
Incompatible materials	Acids, Oxidants, Acid Chlorides, Acid Anhydrides, Alkali Metals, Reducing Agents. Bases, Amines, alkali metals, metals, permanganates, fluorine, metal acetylides, hexalithium disilicide.
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions. Carbon oxides. Hydrogen chloride gas.

SECTION 11 - TOXICOLOGICAL INFORMATION

ETHANOL (ABSOLU)

Routes of exposure	Ingestion.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	Irritation and tearing.
- Skin	May cause skin irritation.
- Inhalation	May cause respiratory tract irritation.
Acute toxicity (Ingestion)	Euphoria, a feeling of intoxication, followed by central nervous system depression, which may include headache, nausea, dizziness, incoordination, speech disturbance, mental confusion and of narcosis.
Chronic exposure effects / symptoms	Cirrhosis of the liver and various diseases affecting the gastrointestinal, cardiovascular, nervous, hematological and respiratory systems.
DL50 (specify species and route of entry)	LD50 Oral - Rat - 7000 mg/kg LD50 Dermal - Rabbit - > 2,000 mg / kg
CL50 (specify species and route of entry)	LC50 Inhalation - Rat - 4h - 116 mg/L. LC50 Inhalation - Mouse - 1h - 60000 ppm.
ETA (Estimated Acute Toxicity)	

METHANOL

Routes of exposure	Ingestion, inhalation, skin and eyes.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	May cause eye irritation.
- Skin	Irritation and dermatitis.
- Inhalation	Irritation of the mucous membranes and respiratory tract. Narcotic effects, chest pain, cough, dyspnea, headache, dizziness, watery eyes, paresthesia, nystagmus, drowsiness, confusion, nausea and vomiting.
Acute toxicity (Ingestion)	Irritation of the mucous membranes. Narcotic effects, liver, kidney and eye damage, abdominal pain, cramps, diarrhea, headache, dizziness, paresthesia, nystagmus, drowsiness, incoordination, acidosis, nausea and vomiting, seizures, hypotension, respiratory collapse, loss of consciousness, coma and can lead to death. Acute absorption of methanol can cause blindness. Damage to: liver, kidneys, eyes, heart, central nervous system.
Chronic exposure effects / symptoms	Headache, dizziness, nausea, visual disturbances, decreased visual acuity, liver and kidney damage.
DL50 (specify species and route of entry)	LD50 Oral - Rat - 1187 mg/kg LD50 Dermal - Rabbit - 17,100 mg/kg.
CL50 (specify species and route of entry)	LC50 Inhalation - Rat: 64000 ppm/4 h. LC50 Inhalation - Rat 115.9-130.7mg/L air / 4h.

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 - 782 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 Oral: 5458 mg/kg - Rat LD50 Dermal: > 5000 mg/kg - Undefined species LC50 Inhalation: 30300 ppm - 4h - Undefined species

SECTION 12 - ECOLOGICAL INFORMATION

Available ecological information	No
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SECTION 13 - DISPOSAL CONSIDERATIONS

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

SECTION 14 - TRANSPORT INFORMATION

UN Number	2924
UN Proper shipping name	LIQUIDE INFLAMMABLE, CORROSIF, N.S.A.
Transport hazard class(es)	3 Flammable liquids 8 Corrosive substances
Packing group	II
Limited quantity index	1L
ERAP Index	-
Special precautions	16 (éthanol, isopropanol, méthanol, acide chlorhy)

SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA	Flammable liquids category 2 Specific Target Organ Toxicity - Single exposure category 1 Corrosive to metals-Category 1 Serious eye damage/eye irritation - Serious eye damage category 1 Skin corrosion/irritation - Skin corrosion category 1
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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.

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