



SAFETY DATA SHEET

SECTION 01 - IDENTIFICATION

Product Identifier	ACETIC ACID, GLACIAL
Other identification (Chemical name, Commercial name, Synonymous)	ACIDE ACÉTIQUE; ACIDE ÉTHANOÏQUE; ACIDE MÉTHANECARBOXYLIQUE; ACIDE DE VINAIGRE; ACI-JEL
Product code	AR-0103; AT-0103
Chemical formula	CH_3COOH
Molar weight	60.05
Recommended use and Restrictions on use	For laboratory, school, commercial or industrial use. Not for medical or household use. Do not use for medical, food or household purposes.
Supplier	LABORATOIRE MAT 610, rue Adanac Québec Québec G1C 7B7 418-660-8666 Mon-Fri 8h-16h www.labmat.com labmat@labmat.com
Emergency phone	418-660-8666 Mon-Fri 8h-16h CENTRE ANTI-POISON DU QUÉBEC 800-463-5060
Date SDS	2025-08-26

SECTION 02 - HAZARDS IDENTIFICATION

WHIMS CANADA

- Skin corrosion/irritation - Skin corrosion - category 1A
- Flammable liquids - category 3
- Serious eye damage/eye irritation - Eye irritation - category 1
- Corrosive to metals - category 1

PICTOGRAMS



Signal Word

DANGER

Hazards statements (H)

- Causes severe skin burns and eye damage
- Flammable liquid and vapour
- Causes serious eye damage
- May be corrosive to metals

Precautionary statements (P)

- Do not breathe mists, gases, vapors and other fumes, or the product itself.
- Wear protective gloves (nitrile, butyle, neoprene), protective clothing and eye and face protection.
- IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse with water.
- IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
- Immediately call a POISON CENTER or a physician.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- Store locked up.
- Dispose of contents and container in accordance with local, regional and national regulations, or contact a specialist waste disposal company.
- Keep away from heat, sparks, open flames, hot surfaces. — No smoking.
- Keep container tightly closed.
- Ground and bond container and receiving equipment.
- Use explosion-proof equipment.
- Use only non-sparking tools.
- Take precautionary measures against static discharge.
- In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide to extinguish.
- Store in a well-ventilated place. Keep cool.
- Keep only in original container.
- Absorb spillage to prevent material damage.

Other dangers

NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Significant; 4=Extreme)

Health 3
Fire 2
Reactivity 0
Special danger

SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Component	No. CAS	% Weight
Glacial acetic acid	64-19-7	<=100%

SECTION 04 - FIRST AID MEASURE

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 contaminated clothing. If irritation persists, seek medical attention.
Inhalation	Move the unwell person to the 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)	The product is a corrosive material. Main symptoms of high exposure: Chemical burns of the skin, eyes and respiratory and digestive mucous membranes. Skin, eye and respiratory system irritation. Cough. Breathing difficulties. Nausea and vomiting. Skin sensitizer. The corrosive effect will outweigh the toxicity for the concentrated product. Ref. section 11.
Immediate medical attention and special treatment, if necessary	Treat according to symptoms. Show this sheet to the attending physician.

SECTION 05 - FIREFIGHTING MEASURES

Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	Do not use a jet of water.
Combustion products	Hazardous combustion products formed under fire conditions: Carbon oxides.
Specific hazards of the dangerous product	Moderate risks of fire or explosion in the presence of heat or flame. 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

Personal precautions, protective equipment and emergency measures	Cut off all sources of ignition. Use anti-spark tools and anti-explosion equipment. Avoid the accumulation of charges electrostatic. When handling, wear appropriate safety equipment (reference Section 8 for protective equipment to be used). Ensure a good ventilation. Use NIOSH cartridge respiratory protection if necessary or for larger spills. Evacuate personnel to safe areas.
Methods and materials for containment and cleaning up	Absorb the product with sand or vermiculite. Dilute residues with water, clean and rinse. Dispose of residues in a container for disposal of hazardous materials. Discharge into the environment must be avoided.

SECTION 07 - HANDLING AND STORAGE

Conditions for safe storage	Store in a cool, dry, and well-ventilated place. Keep container tightly closed and store away from heat, moisture, and incompatible products (ref. section 10). Keep away from sources of ignition - No smoking. Take measures to prevent the accumulation of electrostatic charges. Protect from the sun's rays.
Methods of handling	This product is corrosive to metals. Do not bottle in a metal container. Avoid contact with eyes, skin and clothing. Avoid ingestion and inhalation. Keep away from sources of ignition - No smoking. Wear personal protective equipment (ref. section 8) when handling. Always ensure good ventilation. 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

Component	No.-CAS	Control parameters	Value	Basis
Acetic acid	64-19-7	TWA	10ppm	Canada. Ontario OELs
		STEL	15ppm	Canada. Ontario OELs
		TWA	10 ppm 25 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		STEL	15 ppm 37 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		TWA	10 ppm	Canada. British Columbia OEL
		STEL	15 ppm	Canada. British Columbia OEL
		TWAEV	10 ppm 25 mg/m3	Quebec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
		STEV	15 ppm 37 mg/m3	Quebec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
		TWA	10 ppm	USA. ACGIH Threshold Limit Values (TLV)
		STEL	15 ppm	USA. ACGIH Threshold Limit Values (TLV)

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

Gloves resistant to acidic corrosive materials. Suggested material: Nitrile. Neoprene. Butyl. 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

Use safety shoes.

Clothes

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

Use fan. 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
Color	Colorless
Odour	Strong and irritating odor
Odour threshold	Data not available
Melting point and freezing point	16.2°C
Boiling point	Data not available
Flammability	Yes
Lower flammable / Explosive limit	4%V/V
Upper flammable / Explosive limit	16%V/V
Flash point	40°C
Auto-ignition temperature	463.0 °C
Decomposition temperature	Data not available
pH	Solution aqueuse 1.0 M = 2.4 Solution 0.1 M = 2.9 Solution 0.01 M = 3.4
Kinematic viscosity	1.0067 mm²/s (Dynamic=1.056mPas)
Solubility	Sol in water: 602.9 g/L @ 25 °C
Partition coefficient water/n-octanol	log Pow: -0.17
Vapour pressure	11.4 mmHg @ 20°C
Relative density	1.049g/ml @25°C
Vapour density	Data not available
Particle characteristics	Not applicable

SECTION 10 - STABILITY AND REACTIVITY

Reactivity	Acid product, reacts strongly with strong bases. Flammable product, may ignite with source of ignition, if temperature above flash point. May ignite on contact with oxidants if heat and oxygen are present in sufficient quantities. May react violently with incompatible substances.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	May react violently with incompatible substances.
Conditions to avoid	Avoid contact with incompatible materials and extreme temperatures.
Incompatible materials	Strong oxidizers. Bases. Alcohols. Carbonates. Oxydes. Phosphates, 5- azidotétrazole. Halogens. Chromium trioxide. Phosphorus trichloride. Heat and humidity.
Hazardous decomposition products	Carbon monoxide (CO), Carbon dioxide (CO2).

SECTION 11 - TOXICOLOGICAL INFORMATION

ACETIC ACID, GLACIAL

Routes of exposure	Ingestion, inhalation, skin and eye contact.
Acute exposition effects / symptoms:	By exposure route below. The corrosive effect will outweigh the toxicity for the concentrated product.
- Eyes	Severe burns and destruction of ocular tissue that can lead to corneal ulceration and blindness.
- Skin	Severe burns and tissue ulcerations. Perhaps fatal, if the extent of the burns is considerable.
- Inhalation	Spasms. Irritation and inflammation of the nose, throat and lungs. Edema of the larynx and bronchi. Chemical pneumonitis. Pulmonary edema. Can lead to death.
Acute toxicity (Ingestion)	Corrosion and ulceration of the mouth, throat, esophagus, stomach and abdominal wall. Dysphagia. Damage to the kidneys. Diarrhea. Bloody vomiting Intense thirst. Circulatory collapse. Loss of consciousness. Coma. Acute absorption can lead to: Possible death.
Chronic exposure effects / symptoms	Burning sensation. Conjunctivitis. Hyperkeratosis. Nervous disorders. Chest pain. Dental enamel abrasion (erosion). Cough. Dyspnoea. Laryngitis. Headache. Dizziness. Diarrhea. Fatigue. Irritability. Loss of appetite. Weight loss. Nausea and vomiting.
DL50 (specify species and route of entry)	LD50 Oral - Rat - 3530 mg/kg. LD50 Dermal - Rabbit - 1060 mg/kg.
CL50 (specify species and route of entry)	LC50 Inhalation - Rat - 4 h - 11.4 mg/L (4400ppm). LC50 Inhalation - Mouse - 1 h - 5620 ppm.

SECTION 12 - ECOLOGICAL INFORMATION

ACETIC ACID, GLACIAL

Ecotoxicity	Toxicity to fish: Semi-static test - LC50 - <i>Oncorhynchus mykiss</i> (rainbow trout) - > 1000 mg/l - 96 h. Toxicity to daphnia and other aquatic invertebrates: EC50 - <i>Daphnia magna</i> (Water flea) - >300 mg/l - 48h.
Persistence and degradability	Biodegradability aerobic - Result: Readily biodegradable
Bioaccumulative potential	Data not available.
Mobility in soil	Probable mobility in the environment due to its solubility in water.
Other adverse effects	Data not available.

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	2789
UN Proper shipping name	ACIDE ACÉTIQUE GLACIAL
Transport hazard class(es)	Matières corrosives 8 Liquides inflammables 3
Packing group	II
Limited quantity index	1 L
ERAP Index	-
Special precautions	-

SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA	- Skin corrosion/irritation - Skin corrosion - category 1A - Flammable liquids - category 3 - Serious eye damage/eye irritation - Eye irritation - category 1 - Corrosive to metals - category 1
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SECTION 16 - OTHER INFORMATION

CNESST: Commission des normes, de l'équité et de la santé et sécurité au travail
NIH: National institute of health (U.S. National Library of Medicine)
ECHA: Agence Européenne de Chimie
ACGIH : American Conference of Governmental Industrial Hygienists
AIHA : American Industrial Hygiene Association
VECD: Valeur d'exposition courte durée
VEMP: Valeur d'exposition moyenne pondérée
CMRG : Chemical Manufacturer's Recommended Guidelines
OSHA : United States Department of Labor - Occupational Safety and Health Administration
TLV : Threshold limit value
TWA: Time-Weighted-Average
STEL: Short Term Exposure Limit
CEIL: Ceiling
RSST: Règlement sur la santé et sécurité au travail (Québec)
INRS: l'Institut national de recherche et de sécurité pour la prévention des accidents du travail et des maladies professionnelles (France)

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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