



Centre Anti-Poison pour le Québec: (800) 463-5060

Tél. (Qc): (418) 660-8666 / 800-890-8666


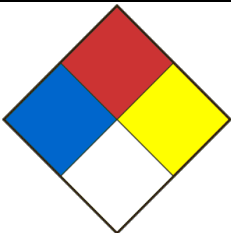
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## SAFETY DATA SHEET

### SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier TRIFLUOROACETIC ACID		Product Use Laboratory use	
Chemical formula CF <sub>3</sub> COOH		Product code TR-0882; TR-0982; TH-0178	Molar weight 114,02
Chemical name / Commercial name / Synonymous TRIFLUOROACETIC ACID, PERFLUOROACETIC ACID, TRIFLUOROETHANOIC ACID, TFA			
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 8/30/2021	SDS Prepared by Laboratoire MAT	E-Mail labmat@labmat.com	

## SECTION 02 - HAZARDS IDENTIFICATION

<b>Classification WHIMS / GHS</b>	<p>Skin corrosion/irritation - Skin corrosion category 1A</p> <p>Serious eye damage/eye irritation - Serious eye damage category 1</p> <p>Acute toxicity - Oral category 4</p>
<b>Signal Word</b>	DANGER
<b>Hazards statements (H)</b>	<p>H302 Harmful if swallowed.</p> <p>H314 Causes severe skin burns and eye damage.</p> <p>H318 Causes serious eye damage.</p>
<b>Precautionary statements (P)</b>	<p>P260 Do not breathe dust / fume / gas / mist / vapors / spray.</p> <p>P264 Wash the areas of the body that have been in contact with the product after handling.</p> <p>P270 Do not eat, drink or smoke when using this product.</p> <p>P280 Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.</p> <p>P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.</p> <p>P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.</p> <p>P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.</p> <p>P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P310 Immediately call a POISON CENTER or doctor/physician.</p> <p>P321 Specific treatment (see section 4 of the SDS and on this label).</p> <p>P330 Rinse mouth.</p> <p>P363 Wash contaminated clothing before reuse.</p> <p>P405 Store locked up.</p> <p>P501 Dispose of contents/container in accordance with local / regional / national / international regulations or contact a specialist waste disposal company.</p>
<b>PICTOGRAMS</b>	
<b>Other dangers</b>	NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Signifiant; 4=Extreme)
	<p><b>Health</b> 3</p> <p><b>Fire</b> 0</p> <p><b>Reactivity</b> 1</p> <p><b>Special danger</b></p>

## SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%)
Acide trifluoroacétique	76-05-1	<=100

## SECTION 04 - FIRST AID MEASURES

<b>Eye contact</b>	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.
<b>Skin contact</b>	Wash skin with plenty of water for at least 15 minutes. Remove soiled clothing. If irritation persists, seek medical attention.
<b>Inhalation</b>	Move the unwell person to the fresh air. If breathing is difficult, give oxygen. Consult a physician.
<b>Ingestion</b>	Do NOT induce vomiting. If the person is conscious, rinse the mouth with water. Never give anything by mouth to an unconscious person. Consult a physician.
<b>Most important symptoms and effects (acute and delayed)</b>	Main symptoms of high exposure: Causes burns, regardless of exposure routes. The corrosive effect will outweigh the toxicity for the concentrated product. Cough. Nausea and vomiting. Drowsiness. Effects may be delayed. Ref. section 11.
<b>Immediate medical attention and special treatment, if necessary</b>	In case of medical consultation, keep this sheet available.
<b>General advice</b>	Show this safety data sheet to the doctor in attendance.

## SECTION 05 - FIREFIGHTING MEASURES

<b>Flammability</b>	No
<b>Ignition conditions</b>	Non flammable.
<b>Suitable extinguishing media</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
<b>Unsuitable extinguishing media</b>	Do not use a concentrated stream of water that could spread fire.
<b>Hazardous combustion products</b>	Hazardous combustion products formed under fire conditions: Carbon oxides. Hydrogen fluoride.
<b>Special fire and explosion hazards</b>	May react violently with incompatible products (Ref Section 10).
<b>Special protective equipment and precautions for firefighters</b>	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

<b>Methods and materials for containment and cleaning up / Personnal precautions, protective equipment</b>	Evacuate personnel to safe areas. 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. Do not let product enter drains. Discharge into the environment must be avoided.
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## SECTION 07 - HANDLING AND STORAGE

<b>Conditions for safe storage</b>	Keep container tightly closed in a dry and well-ventilated place. Close all opened containers carefully and store vertically to avoid any flow. Do not store in metal containers. Keep container tightly closed and store away from heat, moisture, and incompatible products. Hygroscopic.
<b>Methods of handling</b>	Avoid contact with the skin, eyes and clothes. Avoid ingestion and inhalation. Ensure good ventilation. Use a hood preferably. This product is corrosive to metals. Bottle in glass or plastic containers. Wear personal protective equipment when handling. Always ensure good ventilation. Transport according to TDG (ref Section 14)

## SECTION 08 - EXPOSURE CONTROLS/PERSONAL PROTECTION

### Workplace control parameters

Components	CAS-No.	Control	Value	Basis
TRIFLUOROACETIC ACID	76-05-1	TLV, TWA, STEL	No data available	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		TLV, TWA, STEL	No data available	Canada. British Columbia OEL
		TLV, TWA, STEL	No data available	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants

<b>Ventilation</b>	Use fan.
<b>Respiratory</b>	If the permissible levels are exceeded, use a mechanical filter / cartridge against NIOSH vapors or a respirator with air supply.
<b>Gloves</b>	Handle with gloves.
<b>Eyes</b>	Safety goggles with safety shutters.
<b>Shoes</b>	Safety shoes.
<b>Clothing</b>	Labcoat. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
<b>Engineering control</b>	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

<b>Physical state</b>	Liquid.
<b>Appearance</b>	Clair et incolore.
<b>Odour</b>	Âcre.
<b>Odour threshold</b>	Data not available
<b>pH</b>	1.0 à 1 g/l à 20 °C.
<b>Melting point / Freezing point</b>	-15.4°C
<b>Initial boiling point</b>	72.4°C
<b>Boiling range</b>	Data not available
<b>Flash point</b>	> 100°C
<b>Evaporation rate</b>	Data not available
<b>Flammability</b>	No
<b>Lower flammable / Explosive limit</b>	Data not available
<b>Upper flammable / Explosive limit</b>	Data not available
<b>Vapour pressure</b>	107.0 mmHg @ 25°C.
<b>Vapour density</b>	3.9 (Air = 1.0)-
<b>Relative density</b>	1.489g/ml à 20°C
<b>Solubility</b>	Miscible avec l'eau, l'alcool, l'acétone et l'éther.
<b>Partition coefficient water/n-octanol</b>	log Pow: -2.10.
<b>Auto-ignition temperature</b>	Data not available
<b>Decomposition temperature</b>	Data not available
<b>Viscosity</b>	0.813 cP à 25 °C.

## SECTION 10 - STABILITY AND REACTIVITY

<b>Reactivity</b>	Acid product, reacts strongly with strong bases. Reacts strongly with metals. May react violently with incompatible substances.
<b>Chemical stability</b>	Stable under recommended storage conditions. Hygroscopic.
<b>Possibility of hazardous reactions</b>	May react violently with incompatible substances.
<b>Conditions of instability (Including sensitivity to shock / static discharge / vibration)</b>	Exposure to moist air or water. Exposure to light. Avoid contact with incompatible materials. Avoid excessive heat.
<b>Incompatible material</b>	Strong oxidizing agents (nitric acid, perchloric acid, peroxides, chlorates and perchlorates), reducing agents (potassium, sodium, metal hydrides), bases, lithium tetrahydroaluminate, heat and moisture. Amines. Metals. Alkali metals. Epoxies. Alcohols.
<b>Hazardous decomposition products</b>	Hazardous decomposition products formed under fire conditions. Carbon oxides. - Gaseous hydrogen fluoride.

## SECTION 11 - TOXICOLOGICAL INFORMATION

### TRIFLUOROACETIC ACID

<b>Routes of exposure</b>	Ingestion, inhalation, skin and eyes.
<b>Acute exposition effects / symptoms:</b>	By exposure route below.
<b>- Eyes</b>	Severe irritation and burning may cause permanent eye damage.
<b>- Skin</b>	Severe irritation and burning of tissue, especially if the skin is moist or moist.
<b>- Inhalation</b>	Spasms, irritation and inflammation of the nose, throat and lungs. Edema of the larynx and bronchi. Chemical pneumonitis and pulmonary edema that can lead to death.
<b>Acute toxicity (Ingestion)</b>	Irritation and burning of the mouth, throat, esophagus and abdominal wall. Dysphagia, abdominal pain, cramps, diarrhea, melena, hematemesis, sweating, salivation, tremors, convulsions, stupor, respiratory collapse, unconsciousness, coma and can lead to death. The product is a corrosive material. Born not perform gastric lavage, do not induce vomiting. Check for lack of perforation Stomach or oesophageal: Ingestion causes severe swelling, serious injury to delicate fabrics and a danger of perforation.
<b>Chronic exposure effects / symptoms</b>	Burning sensation, nerve disorders, lung and eye damage, chest pain, cough, dyspnea, laryngitis, headache, dizziness, tearing, confusion, irritability, sweating, salivation, tremors, fatigue, muscle weakness, loss of weight and loss of appetite, seizures, nausea and vomiting. Target organs: Liver, kidney.
<b>DL50 (specify species and route of entry)</b>	LD50 Oral - Rat - 200-400 mg/kg. LD50 Dermal - Data not available.
<b>CL50 (specify species and route of entry)</b>	CL50 inhalation - Rat 10000 mg/m3 - 4 h.

## SECTION 12 - ECOLOGICAL INFORMATION

<b>Ecotoxicity</b>	LC50 - Danio rerio (zebra fish) - >1000 mg/L - 96 h EC50 - Daphnia magna (Water flea) - 55 mg/L - 24 h.
<b>Persistence and degradability</b>	Aerobic Biodegradability - Duration of exposure 127 days Result: 11% - Not intrinsically biodegradable. (OECD Guideline 302A). Result: 0% - Not readily biodegradable. (OECD guideline 301D) Remarks: (bibliography).
<b>Bioaccumulative potential</b>	No bioaccumulation is to be expected (log Pow <= 4).
<b>Mobility in soil</b>	Probable mobility in the environment due to its solubility in water.
<b>Other adverse effects</b>	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life with long lasting effects. Do not throw residues in the sewer.

## SECTION 13 - DISPOSAL CONSIDERATIONS

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

## SECTION 14 - TRANSPORT INFORMATION

UN Number	2699
UN Proper shipping name	ACIDE TRIFLUOROACÉTIQUE
Transport hazard class(es)	8 Corrosive substances
Packing group	I
Limited quantity index	OL
ERAP Index	3000
Special precautions	-

## SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA	Skin corrosion/irritation - Skin corrosion category 1A Serious eye damage/eye irritation - Serious eye damage category 1 Acute toxicity - Oral category 4
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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.

Last Update: 8/30/2021