

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			Product Use		
ACETIC ACID (5.0M)			Laboratory use		
Chemical formula				Product code	Molar weight
СН3СООН				AS-0450	60,05
Chemical name / Commercial name / Synonymous ACIDE ACÉTIQUE, ACIDE ÉTHANOÏQUE, ACIDE MÉTHANECARBOXYLIQUE, AC			OXYLIQUE, ACIDE [	DE VINAIGRE, ACI-JEL	
Supplier's name			Address-Street		
Laboratoire MAT		610, Adanac Street			
City		Province			
Québec		Québec			
Postal code	Postal code Internet		Phone number		
G1C 7B7 www.labmat.com		418-660-8666 / 800-890-8666			
Emergency phone CANUTEC: 613-996-6666		CENTRE ANTI-POISON DU QUÉBEC 800-463-5060			
Date SDS	SDS Prepared by			E-Mail	
2/7/2019	/7/2019 Laboratoire MAT		Т	labmat@labmat.com	

# **SECTION 02 - HAZARDS IDENTIFICATION**

Classification WHIMS / GHS	Corrosive to metals	-Category 1			
	Serious eye damag	ne/eye irritation - Serious eye damage category 1			
	Liquides inflammabl	es category 4			
	Skin corrosion/irrito	ation - Skin corrosion category 1			
Signal Word	DANGER				
Hazards statements (H)	H290 May be corr	osive to metals.			
	H314 Causes sever	re skin burns and eye damage.			
	H318 Causes serious eye damage.				
	H227 Combustible	liquid.			
Precautionary statements (P)	P210	Keep away from heat/sparks/open flames/hot surfaces. — No smoking.			
	P234	Keep only in original container.			
	P260	Do not breathe dust / fume / gas / mist / vapours / spray.			
	P264	Wash the areas of the body that have been in contact with the product after handling.			
	P280	Wear protective gloves/protective clothing/eye protection/face protection.			
	P301 + P330 + P3	331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.			
	P303 + P361 + P3	353 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 + P3	338 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 doctor/physician.			
	P321	Specific treatment (see section 4 of the SDS and on this label).			
	P363	Wash contaminated clothing before reuse.			
	P370 + P378	In case of fire: Use water spray or alcohol-resistant foam, or dry powder or carbon dioxide for extinction.			
	P390	Absorb spillage to prevent material damage.			
	P405	Store locked up.			
	P406	Store in a corrosion resistant container $\slash$ or a container with corrosion resistant liner.			
	P501	Dispose of contents/container in accordance with local / regional / national / international regulations or contact a specialist waste disposal company.			
	P403	Store in a well-ventilated place.			
PICTOGRAMS					
Other dangers	NF	PA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Signifiant; 4=Extreme)			
A	Health 2				
	Fire 2				
	Reactivity 0				
	Special danger				

# **SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS**

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%)
Acide acétique	64-19-7	30
Eau	7732-18-5	Balance

### **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	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)	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	No longer flammable at this concentration. But remains combustible.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	Data not available.
Hazardous combustion / decomposition products	Hazardous decomposition products formed under fire conditions. Carbon oxides.
Special fire and explosion hazards	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	Evacuate personnel to safe areas. Cut off all sources of ignition. Absorb the product with sand or
containment and cleaning up /	vermiculite. Dilute residues with water, clean and rinse. Ensure a good ventilation of the premises. Dispose
Personnal precautions, protective	of residues in a container for disposal of hazardous materials. When handling, wear suitable safety
equipment	equipment. Use breathing apparatus if necessary. Avoid breathing vapours, mist or gas.

# **SECTION 07 - HANDLING AND STORAGE**

	Store in a cool, dry place. Store in a well-ventilated area. Keep container tightly closed and store away from heat, water, moisture, and incompatible products. 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	Keep away from sources of ignition - No smoking. Avoid inhalation of vapour or mist.

# SECTION 08 - EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Workplace control parameters

Components	CAS-No.	Value	Control parameters	Basis
Acetic acid	64-19-7	TWA	10.000000 ppm 25.000000 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		STEL	15.000000 ppm 37.000000 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		TWA	10.000000 ppm	Canada. British Columbia OEL
		STEL	15.000000 ppm	Canada. British Columbia OEL
		TWAEV	10.000000 ppm 25.000000 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
		STEV	15.000000 ppm 37.000000 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
		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	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
		STEV	15 ppm 37 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
		TWA	10.000000 ppm	USA. ACGIH Threshold Limit Values (TLV)
		STEL	15.000000 ppm	USA. ACGIH Threshold Limit Values (TLV)
		TWA	10 ppm	USA. ACGIH Threshold Limit Values (TLV)
		STEL	15 ppm	USA. ACGIH Threshold Limit Values (TLV)

Data source	Sigma-Aldrich (Millipore Sigma)
Ventilation	Fan.
Respiratory	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.
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**

	T
Physical state	Liquid.
Appearance	Liquide incolore-
Odour	Odeur forte et irritante.
Odour threshold	Data not available
рН	Solution aqueuse 1.0 M = $2.4$ Solution 0.1 M = $2.9$ Solution 0.01 M = $3.4$ .
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	H2O: 602.9 g/L @ 25 °C.
Vapour density	Data not available
Relative density	1.0187g/ml à 20°C
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	Non-reactive under normal conditions.			
Chemical stability	Stable under recommended storage conditions.			
Possibility of hazardous reactions	Stable under normal conditions.			
Conditions of instability (Including sensitivity to shock / static discharge / vibration)	Heat, flames, sparks. Avoid contact with incompatible materials and extreme temperatures.			
Incompatible material	Strong oxidizing agents (chromic acid, nitric acid, peroxides, chlorates and perchlorates), bases, alcohols, carbonates, hydroxides, oxides, phosphates, 5-azidotetrazole, bromine pentafluoride, chromium trioxide, hydrogen peroxide, potassium permanganate, sodium peroxide, phosphorus trichloride, heat and moisture.			
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions. Carbon oxides.			

# **SECTION 11 - TOXICOLOGICAL INFORMATION**

### **ACETIC ACID, GLACIAL**

Routes of exposure	Ingestion, inhalation, skin and eyes.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	Severe burns and destruction of ocular tissue that can lead to corneal ulceration and blindness.
- Skin	Severe burns and tissue ulcerations. May be 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 and pulmonary edema that can lead to death.
Acute toxicity (Ingestion)	Corrosion and ulceration of the mouth, throat, esophagus, stomach and abdominal wall. Dysphagia, kidney damage, bloody diarrhea and vomiting, diaphoresis, intense thirst, shock, circulatory collapse, unconsciousness, coma and can lead to death.
Chronic exposure effects / symptoms	Burning sensation, conjunctivitis, hyperkeratosis, nervous disorders, chest pain, dental erosion, cough, dyspnea, laryngitis, headache, dizziness, diarrhea, asthenia, irritability, weight loss and loss of appetite, nausea and vomiting.
DL50 (specify species and route of entry)	LD50 Oral - Rat - 3,530 mg/kg. LD50 Dermal - Rabbit - 1060 mg/kg
CL50 (specify species and route of entry)	LC50 Inhalation - Rat -4h - 11.4 mg/L (4400 ppm - 4 h) LC50 Inhalation - Mouse- 1hre - 5620 ppm

#### **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: >5000 mg/kg -Oral Rat LD50: 3533 mg/kg -Dermal Rabbit LC50: 38 mg/L- 4h - Inhalation Rat

### **SECTION 12 - ECOLOGICAL INFORMATION**

	Acetic acid. Toxicity to fish: Semi-static test LC50 - Oncorhynchus mykiss: > 1,000 mg/l - 96 h Toxicity to daphnia and other aquatic invertebrates: EC50 - Daphnia magna: > 300.82 mg/l - 48 h
Persistence and degradability	Biodegradability Result: - Readily biodegradable
Bioaccumulative potential	Data not available.
Mobility in soil	Data not available.
Other adverse effects	Biochemical oxygen demand (BOD): 880 mg/g

# **SECTION 13 - DISPOSAL CONSIDERATIONS**

Waste Disposal Method	Comply with federal, state and local regulations regarding waste disposal.
Contaminated Packaging	Dispose of as unused product.

#### **SECTION 14 - TRANSPORT INFORMATION**

UN Number	2790
UN Proper shipping name	ACIDE ACÉTIQUE EN SOLUTION contenant plus de 10 % et moins de 50 %
Transport hazard class(es)	8 Corrosive substances
Packing group	
Limited quantity index	1L
ERAP Index	•
Special precautions	-

### **SECTION 15 - REGULATORY INFORMATION**

Corrosive to metals-Category 1 Serious eye damage/eye irritation - Serious eye damage category 1
Liquides inflammables category 4  Skin corrosion/irritation - Skin corrosion category 1

### **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: 2/7/2019