

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		
PEROX				Laboratory use		
Chemical formula				Product code	Molar weight	
C <sub>2</sub> H <sub>4</sub> O <sub>3</sub>				PS-0600 79,		
Chemical name / Commercie PEROX, PERACETIC	al name / Synonymous ACID, ACIDE PERACÉTIQ	UE, ACIDE PEROXY	ACÉTIQUE			
Supplier's name			Address-Street			
Laboratoire MAT			610, Adanac Street			
City			Province			
Québec			Québec	Québec		
Postal code	Internet	Internet		Phone number		
G1C 787	www.labmat.co	www.labmat.com		418-660-8666 / 800-890-8666		
Emergency phone	CANUTEC: 6	CANUTEC: 613-996-6666		CENTRE ANTI-POISON DU QUÉBEC 800-463-5060		
Date SDS SDS Prepared by		SDS Prepared by	E-Mail			
5/22/2019 Laboratoire		Laboratoire MA	AT	labmat@labmat.com		

## **SECTION 02 - HAZARDS IDENTIFICATION**

Classification WHIMS / GHS		
	Serious eye damag	e/eye irritation - Serious eye damage category 1
	Acute toxicity - Orc	al category 3
	Acute toxicity - Der	mal category 3
	Acute toxicity - Inho	alation category 3
	Skin corrosion/irrite	ation - Skin corrosion category 1
	,	
	Organic peroxides	
	Flammable liquids c	ategory 3
Signal Word	DANGER	
Hazards statements (H)	H318 Causes serio	us eye damage.
	H301 Toxic if swall	owed.
	H311 Toxic in conte	act with skin.
	H314 Causes sever	re skin burns and eye damage.
	H331 Toxic if inhal	
	H242 Heating may	
	H226 Flammable li	quid and vapour.
Precautionary statements (P)	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	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.
	P260	Do not breathe dust / fume / gas / mist / vapours / spray.
	P261	Avoid breathing dust / fume / gas / mist / vapours / spray.
	P264	Wash the areas of the body that have been in contact with the product after handling.
	P270	Do no eat, drink or smoke when using this product.
	P271	Use only outdoors or in a well-ventilated area.
	P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
		31 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
	P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
		853 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.
	P311	Call a POISON CENTER or doctor/physician.
	P312	Call a POISON CENTER or doctor/physician if you feel unwell.
	P321	Specific treatment (see section 4 of the SDS and on this label).
	P330	Rinse mouth.
	P363	Wash contaminated clothing before reuse.
	P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
	P405 P501	Store locked up. Dispose of contents/container in accordance with local / regional / national / international regulations or contact a specialist waste disposal company.
	P361 + P364	Take off immediately all contaminated clothing and wash it before reuse.
	P210	Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
	P234	Keep only in original container.
	P235	Keep cool.
	P240	Ground/bond container and receiving equipment.
	P370 + P378	In case of fire: Use water, foam or carbon dioxide (no dry agent) for extinction.
	P403	Store in a well-ventilated place.
	P410	Protect from sunlight.
	P411	Store at temperatures not exceeding 40 °C.
	P420	Store away from other materials.
	P233	Keep container tightly closed.
	P241	Use explosion-proof electrical/ventilating/lighting equipment.
	P242	Use only non-sparking tools.

	P243	Take precautionary measures against static discharge.
	P403 + P235	Store in a well-ventilated place. Keep cool.
PICTOGRAMS		
Other dangers		NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Signifiant; 4=Extreme)
	Health	4
	Fire	1
	Reactivity	2
	Special dange	rOX

## SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%)
Acide peracétique	79-21-0	<=5
Acide acétique	64-19-7	<=5
Peroxyde d'hydrogène	7722-84-1	26-31
Εαυ	7732-18-5	64-69

### **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	Heat, sparks and open flame. May ignite if product dries on clothing, wood or other combustible materials. May cause fire on contact with organic material.
Suitable extinguishing media	Water.
Unsuitable extinguishing media	Do not use dry chemical, they can accelerate the peroxide decomposition process.
Hazardous combustion / decomposition products	Hazardous decomposition products formed under fire conditions. Carbon monoxide (CO) Carbon dioxide (CO2) Peroxide breaks down into oxygen and water.
Special fire and explosion hazards	Oxidizer. May cause fire on contact with organic material. Its decomposition releases oxygen and increases the flammability and combustion rates of flammable vapors. Vapors concentrated to more than 40% can decompose explosively. Violent and explosive reactions may occur on contact alone or in combination with the following products: alcohols, carboxylic acids, nitrogen bases, ketones, hydrocarbons, heavy metal salts, metal oxides, metals, acetic acid, hydrochloric acid, chlorosulfonic acid, formic acid, phosphoric acid, sulfuric acid, tartaric acid, trifluoroacetic acid, acetaldehyde, vinyl, acetone, acetic anhydride, ammonia, aniline, antimony trisulfide, 2-butanone, 2-propanol, 3-pentanone, tin chloride, cellulose, charcoal, cyclohexanone, cyclopentanone, manganese dioxide, lead monoxide and dioxide, ethanol, ether, ethyl acetate, ferrous sulfate, formaldehyde, glycerine, hydrozene, hydrogen, lithium, methanol, palladium, phosphorus and its compounds, potassium, potassium permanganate, sodium, sodium hydroxide and toluene. 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

	Evacuate personnel to safe areas. Remove 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
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. Do not let
	product enter drains.

### SECTION 07 - HANDLING AND STORAGE

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Keep container tightly closed and store away from heat, light, organic materials and incompatible materials. Protect from the sun's rays. Do not use pressure to empty the container. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep away from sources of ignition - No smoking. Take measures to prevent the accumulation of electrostatic charges.
Always open containers slowly to allow any excess pressure to vent. Avoid inhalation of vapour or mist. 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-I	No.	Value	Control parameters	T	Basis
Hydrogen peroxide		7722	-84-1	TWA			Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
Remarks		Occupational exposure limit is based on irr unusual work schedules is not required					on effects and its adjustment to compensate for
		TWA		1.000000 ppm	ı	Canada. British Columbia OEL	
				TWAE	/ 1.000000 ppm 1.400000 mg/m3	ı	Canada. Ontario OELs
				TWAE	/ 1.000000 ppm 1.400000 mg/m3		Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
				TWA	1 ppm 1.4 mg/m3		Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
					re limit is based on es is not required	irritatio	on effects and its adjustment to compensate for
				TWA	1 ppm		Canada. British Columbia OEL
				TWAE	√ 1 ppm 1.4 mg/m3		Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
				TWA	1.000000 ppm	ı	USA. ACGIH Threshold Limit Values (TLV)
			1	TWA	1 ppm		USA. ACGIH Threshold Limit Values (TLV)
Components	CAS-N	No.	Value		ntrol ameters	Basi	s
Acetic acid	64-19	9-7 TWA		25.	10.000000 ppm 25.000000 mg/m3		ada. Alberta, Occupational Health and Safety e (table 2: OEL)
			STEL	15. 37.	000000 ppm 000000 /m3		ada. Alberta, Occupational Health and Safety e (table 2: OEL)
			TWA	U.	000000 ppm	Can	ada. British Columbia OEL
			STEL	15.	000000 ppm	Can	ada. British Columbia OEL
			TWAEV	25.	000000 ppm 000000 /m3	and	bec. Regulation respecting occupational health safety, Schedule 1, Part 1: Permissible exposure es for airborne contaminants
			STEV	15. 37.	000000 ppm 000000 /m3	and	bec. Regulation respecting occupational health safety, Schedule 1, Part 1: Permissible exposure es for airborne contaminants
			TWA	10	ppm mg/m3	Can	ada. Alberta, Occupational Health and Safety e (table 2: OEL)
			STEL	15 37	ppm mg/m3		ada. Alberta, Occupational Health and Safety e (table 2: OEL)
			TWA		ppm	Can	ada. British Columbia OEL
			STEL		ppm		ada. British Columbia OEL
			TWAEV		ppm mg/m3	and	bec. Regulation respecting occupational health safety, Schedule 1, Part 1: Permissible exposure es for airborne contaminants
			STEV		ppm mg/m3	and	bec. Regulation respecting occupational health safety, Schedule 1, Part 1: Permissible exposure es 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	1154	. ACGIH Threshold Limit Values (TLV)

Data source	Sigma-Aldrich.
Ventilation	Fan.
	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	Liquide incolore.
Odour	âcre.
Odour threshold	Data not available
pН	Donnée non-disponible.
Melting point / Freezing point	Data not available
Initial boiling point	Data not available
Boiling range	Data not available
Flash point	40-56 °C.
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 dans l'eau en toutes proportions.
Vapour density	Data not available
Relative density	1,12 (théorique)g/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

D	
Reactivity	Oxidizer: risk of fire in case of contact with combustible / organic substance.
Chemical stability	Stable under recommended storage conditions. Oxidizer: Fire hazard in case of contact with combustible / organic substance.
Possibility of hazardous reactions	Stable under normal conditions. Oxidizer.
Conditions of instability (Including sensitivity to shock / static discharge / vibration)	Avoid contact with incompatible materials and extreme temperatures. Excessive heat, light and contaminations of all kinds.
Incompatible material	When pure, the products react with the following products: Reducing agents (potassium, sodium, hydrides of metals), organic and / or combustible substances, alcohols, acetone, wood, fabrics, hydrocarbons, metal oxides and sulphides, copper, zinc, nickel, lead, fine metal powders, iron and its compounds. 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. To our knowledge, the product has not been fully evaluated.
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions. Oxygen and water.

## 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

#### HYDROGEN PEROXIDE 30-35%

Routes of exposure	Ingestion, inhalation, skin and eyes.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	Irritation and burns of the eye tissue that can lead to corneal ulceration and blindness.
- Skin	Irritation and tissue burns. May cause formation of vesicular lesions.
- 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)	Inflammation and ulceration of the mucous membranes of the mouth and throat. Burns of the esophagus, stomach and gastrointestinal tract. Sudden release of oxygen can cause distention of the esophagus and stomach causing internal bleeding that can lead to death.
Chronic exposure effects / symptoms	Burning sensation, dermatitis, conjunctivitis, nervous disorders, liver and kidney damage, chest pain, cough, dyspnoea, laryngitis, headache, dizziness, tearing, erythema, fatigue, irritability, weight loss and loss of appetite, seizures, nausea and vomiting.
DL50 (specify species and route of entry)	LD50 Oral - Rat - 693 mg/kg. LD50 Dermal - Rat - 2000 mg/kg
CL50 (specify species and route of entry)	LC50 Inhalation - Rat - 4h - 2000 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:	To our knowledge, the product has not been fully evaluated
ETA Mix (Estimated Acute Toxicity)	LD50 Oral : 111 mg/kg - Rat LD50 Dermal: 899 mg/kg - Lapin LC50 Inhalation: 528mg/m <sup>3</sup> - 4h - Undefined species

## SECTION 12 - ECOLOGICAL INFORMATION

	Hydrogen peroxide: Toxicity to fish: LC50 - Oncorhynchus mykiss (rainbow trout) - 22 mg/l - 96 h (Hydrogen peroxide) Toxicity to daphnia and other aquatic invertebrates: EC50 - Daphnia magna (Water flea) - 24 mg/l - 48 h (Hydrogen peroxide) 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 (Water flea) - > 300.82 mg/l - 48 h
Persistence and degradability	Biodegradability Readily biodegradable.
Bioaccumulative potential	Data not available.
Mobility in soil	Data not available.
Other adverse effects	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life.

#### **SECTION 13 - DISPOSAL CONSIDERATIONS**

•	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	3149
UN Proper shipping name	PEROXYDE D'HYDROGENE ET ACIDE PEROXYACÉTIQUE EN MÉLANGE STABILISÉ avec acide(s), eau et au plus 5% d'acide peroxyacétique.
Transport hazard class(es)	5.1 Oxidizing substances 8 Corrosive substances
Packing group	1
Limited quantity index	1L
ERAP Index	-
Special precautions	

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

WHIMS CANADA	Serious eye damage/eye irritation - Serious eye damage category 1
	Acute toxicity - Oral category 3
	Acute toxicity - Dermal category 3
	Acute toxicity - Inhalation category 3
	Skin corrosion/irritation - Skin corrosion category 1
	Organic peroxides type D
	Flammable liquids 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.

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