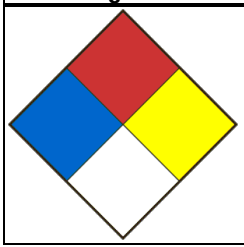
Centre Anti-Poison pour le Québec: (800) 463-5060
Tél. (Qc): (418) 660-8666 / 800-890-8666
Fax. (Qc): (418) 660-8998

SAFETY DATA SHEET

SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier HYDROGEN PEROXIDE (25% W/W)		**Product Use** Laboratory use	
Chemical formula H_2O_2		**Product code** HS-0025	**Molar weight** 34,02
Chemical name / Commercial name / Synonymous SOLUTION DE PEROXYDE D'HYDROGÈNE, DIOXYDE D'HYDROGÈNE, HYDROPROXYDE, ALBONE, PERHYDROL, PERONE, SUPEROXOL			
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 1/23/2019	**SDS Prepared by** Laboratoire MAT	**E-Mail** labmat@labmat.com	

SECTION 02 - HAZARDS IDENTIFICATION

Classification WHIMS / GHS	Serious eye damage/eye irritation - Serious eye damage category 1 Specific target organ toxicity - Single exposure category 3 Oxidizing liquids category 2 Skin corrosion/irritation - Skin corrosion category 1
Signal Word	DANGER
Hazards statements (H)	H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage. H335 May cause respiratory irritation. H272 May intensify fire; oxidiser.
Precautionary statements (P)	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. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/protective clothing/eye protection/face protection. P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P303 + P361 + P353 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 + 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 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). P363 Wash contaminated clothing before reuse. P403 + P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up. P501 Dispose of contents/container in accordance with local / regional / national / international regulations or contact a specialist waste disposal company. P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking. P220 Keep/Store away from clothing and combustible materials. P370 + P378 In case of fire: Use water (not dry agents) for extinction.
PICTOGRAMS	
Other dangers	NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Signifiant; 4=Extreme)
	**Health** 3 **Fire** 0 **Reactivity** 2 **Special danger**

SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%)
Peroxyde d'hydrogène Eau	7722-84-1 7732-18-5	25 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	No
Ignition conditions	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	The product itself does not burn. 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, hydrazine , 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

Methods and materials for containment and cleaning up / Personnal precautions, protective equipment	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 vapours, mist or gas.

SECTION 07 - HANDLING AND STORAGE

Conditions for safe storage	Store in cool place. Keep container tightly closed and store away from heat, light, organic materials and incompatible materials. Protect from the sun's rays. Keep container tightly closed in a dry and well-ventilated place. Do not use pressure to empty the container. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Methods of handling	Always open containers slowly to allow any excess pressure to vent. Avoid inhalation of vapour or mist.

SECTION 08 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Workplace control parameters

Components	CAS-No.	Value	Control parameters	Basis
Hydrogen peroxide	7722-84-1	TWA	1.000000 ppm 1.400000 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			
		TWA	1.000000 ppm	Canada. British Columbia OEL
		TWAEV	1.000000 ppm 1.400000 mg/m3	Canada. Ontario OELs
		TWAEV	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)
	Occupational exposure limit is based on irritation effects and its adjustment to compensate for unusual work schedules is not required			
		TWA	1 ppm	Canada. British Columbia OEL
		TWAEV	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	USA. ACGIH Threshold Limit Values (TLV)
		TWA	1 ppm	USA. ACGIH Threshold Limit Values (TLV)

Data source	Sigma-Aldrich.
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

Physical state	Liquid.
Appearance	Liquide incolore-
Odour	âcre.
Odour threshold	Data not available
pH	4. (H2O2=Concn wt% = 35, 50, 70, 90; corresponding pH: 4.6, 4.3, 4.4, 5.1).
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	No
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	1.095 (H2O2=Concn wt% = 10,35,50,70; corresponding density: 1.03, 1.13, 1.19, 1.28)g/ml à 25°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. Oxidizer.
Conditions of instability (Including sensitivity to shock / static discharge / vibration)	Excessive heat, light and contaminations of all kinds.
Incompatible material	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.
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions. Oxygen and water.

SECTION 11 - TOXICOLOGICAL INFORMATION

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 : 2730 mg/kg - Rat LD50 Dermal: >5000 mg/kg - Rat LC50 Inhalation: 7881 mg/m^3 - 4h - Rat

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity	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)
Persistence and degradability	Biodegradability Readily biodegradable.
Bioaccumulative potential	Does not bioaccumulate.
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 with long lasting effects.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Disposal Method	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	2014
UN Proper shipping name	PEROXYDE D'HYDROGENE EN SOLUTION AQUEUSE contenant entre 20 et 60%
Transport hazard class(es)	5.1 Oxidizing substances 8 Corrosive substances
Packing group	II
Limited quantity index	1L
ERAP Index	-
Special precautions	-

SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA	Serious eye damage/eye irritation - Serious eye damage category 1 Specific target organ toxicity - Single exposure category 3 Oxidizing liquids category 2 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: 1/23/2019