SAFETY DATA SHEET

SECTION 01 - IDENTIFICATION

Product Identifier	HYDROGEN PEROXIDE 30-35%
Other identification (Chemical name, Commercial name, Synonymous)	SOLUTION DE PEROXYDE D'HYDROGÈNE; DIOXYDE D'HYDROGÈNE; HYDROPROXYDE; ALBONE; PERHYDROL PERONE; SUPEROXOL
Product code	HP-0120; HA-0133
Chemical formula	H_2O_2
Molar weight	34.02
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	2025-10-21

SECTION 02 - HAZARDS IDENTIFICATION

WHIMS CANADA

- Skin corrosion/irritation - Skin corrosion - category 1A
- Serious eye damage/eye irritation - Eye irritation - category 1
- Oxidizing liquids - category 2
- Specific target organ toxicity - Single exposure - category 3

PICTOGRAMS

Signal Word

DANGER

Hazards statements (H)

- Causes severe skin burns and eye damage
- Causes serious eye damage
- May intensify fire; oxidizer
- May cause respiratory irritation

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 away from clothing and combustible materials.
- In case of fire: Use water (not dry agents) to extinguish.
- Use only outdoors or in a well-ventilated area.
- Call a POISON CENTER or a doctor or if you feel unwell.
- Store in a well ventilated place. Keep container tightly closed.

Other dangers

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

Health	2
Fire	0
Reactivity	2
Special danger	OX

SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Component	No. CAS	% Weight
Hydrogen peroxide	7722-84-1	34-38%

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)	Main symptoms of high exposure: Skin whitening. Tingling. Skin irritation. Eyes irritation. Chemical burns of the skin, eyes and respiratory and digestive mucous membranes. 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 to extinguish the fire.
Unsuitable extinguishing media	Do not use dry chemical. Do not use foams. CO2 or halon can provide limited control.
Combustion products	Hazardous combustion products formed under fire conditions: Hydrogen. Oxygen.
Specific hazards of the dangerous product	Powerful oxidizer. Contact with combustible products may cause fire. In the event of a fire, the water in the solution will evaporate, and the oxidizing base product will fuel the fire. Containers exposed to fire or its heat may explode. 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	Evacuate personnel to safe areas. Recommended distance: at least 50 meters (150 feet) for liquids and at least 25 meters (75 feet) for solids. Cut off all sources of ignition. Keep combustibles (wood, paper, oil, etc.) away from spilled material. Avoid breathing in vapours, spray mists or gases. 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.
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. Do NOT use combustible absorbents. 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, water, moisture, and incompatible products (ref. section 10). Do not store in metal containers. Protect from the sun's rays. Use a vented cap to allow pressure to escape.
Methods of handling	Avoid contact withh eyes, skin and clothing. Avoid ingestion and inhalation. Avoid grinding or heat the product in the presence of combustible and organic materials. 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	CAS-No.	Control parameters	Value	Basis
Hydrogen peroxide	7722-84-1	TWA	1ppm 1.4mg/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			
		TWAEV	1 ppm 1.4mg/m3	Canada. Ontario OELs
		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 ppm	USA. ACGIH Threshold Limit Values (TLV)

Data origin	Sigma-Aldrich (Millipore Sigma)
Gloves	Handle with protective gloves. Suggested material: Nitrile. Butyl. Neoprene. 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	Acre
Odour threshold	Data not available
Melting point and freezing point	Concn 35%= -33°C; -0.43°C (Hydrogen Peroxide)
Boiling point	Concn 35%= 108°C; 152°C (Hydrogen Peroxide)
Flammability	Oxydant
Lower flammable / Explosive limit	40%
Upper flammable / Explosive limit	100%
Flash point	Data not available
Auto-ignition temperature	Data not available
Decomposition temperature	Data not available
pH	Concn wt% = 35, 50, 70, 90; corresponding pH: 4.6, 4.3, 4.4, 5.1
Kinematic viscosity	Data not available
Solubility	Soluble in water
Partition coefficient water/n-octanol	Data not available
Vapour pressure	Data not available
Relative density	Concn.30% = 1.11g/ml ; 1.4425g/ml (Hydrogen Peroxide)
Vapour density	1.10
Particle characteristics	Not applicable

SECTION 10 - STABILITY AND REACTIVITY

Reactivity	Oxidizer: risk of fire in case of contact with combustible or organic substance. May react violently with incompatible substances.
Chemical stability	Air sensitive.
Possibility of hazardous reactions	May react violently with incompatible substances. Risk of fire or explosion if heated or crushed in presence of combustible or organic products.
Conditions to avoid	Exposure to light. Exposure to air. Avoid excessive heat. Avoid contact with incompatible materials.
Incompatible materials	Burns with: Organic materials. Can form an explosive mixture with: Alcohols. Bases. Ketones. Hydrocarbides. Metal salts. Metal oxides. Metal sulfides. Acetone. Acid anhydrides. Ammonia. Antimony trisulfide. Charcoal. Ether. Alkali metals. Metals. Permanganates. Phosphorus. And its compounds. Iron. And its compounds. Chlorosulfonic acid. Concentrated sulfuric acid. Carboxylic acids. Hydrochloric acid. Formic acid. Phosphoric acid. Tartaric acid. Trifluoroacetic acid. Reducing agents. Acetaldehyde. Vinyl acetate. Ethyl acetate. Aniline. Metallic hydrides. Tin chloride. Ferrous sulfate. Formaldehyde. Glycerin. Hydrazine.
Hazardous decomposition products	Oxygen.

SECTION 11 - TOXICOLOGICAL INFORMATION

HYDROGEN PEROXIDE 30-35%

Routes of exposure	Ingestion, inhalation, skin and eye contact.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	Irritation. Severe burns and destruction of ocular tissue that can lead to corneal ulceration and blindness.
- Skin	Irritation. Skin whitening. Tingling. May cause: Formation of vesicular lesions.
- Inhalation	Spasms. Irritation and inflammation of the nose, throat and lungs. Chemical pneumonitis. Cough. Breathing difficulties. Edema of the larynx and bronchi. Pulmonary edema. Symptoms may be delayed. Can lead to death.
Acute toxicity (Ingestion)	Corrosion and ulceration of the mouth, throat, esophagus, stomach and abdominal wall. Burning of the mouth, throat, esophagus and abdominal wall. Possible death.
Chronic exposure effects / symptoms	Burning sensation. Dermatitis. Conjunctivitis. Nervous disorders. Liver and kidney damage. Chest pain. Cough. Dyspnoea. Tearing. Headache. Dizziness. Tearing. Erythema. Fatigue. Irritability. Weight loss. Loss of appetite. Nausea and vomiting. Convulsions.
DL50 (specify species and route of entry)	ETA Mix (Estimated Acute Toxicity): LD50 Oral - Rat - ~1980-2000mg/kg. LD50 Dermal - Rabbit - >5000mg/kg.
CL50 (specify species and route of entry)	ETA Mix (Estimated Acute Toxicity) >5000mg/m³.

SECTION 12 - ECOLOGICAL INFORMATION

HYDROGEN PEROXIDE 30-35%

Ecotoxicity	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	Readily biodegradable
Bioaccumulative potential	Accumulation is not expected.
Mobility in soil	Probable mobility in the environment due to its solubility in water.
Other adverse effects	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life. Causes long-term adverse effects.

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	2014
UN Proper shipping name	PEROXYDE D'HYDROGENE EN SOLUTION AQUEUSE contenant entre 20 et 60% de peroxyde
Transport hazard class(es)	Matières comburantes 5.1 Matières corrosives 8
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 - Serious eye damage/eye irritation - Eye irritation - category 1 - Oxidizing liquids - category 2 - Specific target organ toxicity - Single exposure - category 3

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. Naltional Library of Medecine)
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.

LAST UPDATE: 2025-10-21