



PMC WATER SYSTEMS SERVICES INC.

124 CONNIE CRES. UNIT 9 CONCORD, ONTARIO.

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MATERIAL SAFETY DATA SHEET ULTRACLEAN PEROXIDE 29%

Protection Required



SECTION 1 - MATERIAL IDENTIFICATION AND USE

Manufacturer's Name : PMC Water Systems Services Inc.
Manufacturer's Address : 124 Connie Crescent, Unit 9, Concord, ON L4K 1L7
Manufacturer's Phone # : (905) 669-8262
24 Emergency Phone # : Canutec (613) 996-6666
Product Identifier : UltraClean Peroxide 29%
Product Use :

SECTION 2 – COMPOSITION/INGREDIENTS OF MATERIAL

Ingredients	Concentration	CAS #	LD ₅₀	LC ₅₀
Hydrogen Peroxide	27 – 31%	7722-84-1	1193 mg/kg (oral-rat)	1437 mg/m ³ 4 hours (vapour – rat)

SECTION 3 – HAZARDS IDENTIFICATION

Potential Health Effects Signs and Symptoms of Short-Term (Acute) Exposure
Eyes Corrosive. May cause conjunctivitis, corneal burns and permanent damage. Symptoms may occur with delay.
Skin Corrosive. May cause burns resulting in permanent damage. Skin exposure can result in bleaching of the skin and hair. Prolonged exposure may cause severe irritation and white discoloration. Burning may result in localized erythema (redness) or even blistering of the skin.
Inhalation Causes severe respiratory irritation. Vapours may cause pulmonary edema. Toxic effects may be delayed.
Ingestion Ingestion of high concentrations causes rapid release of oxygen which may expand the esophagus or stomach resulting in severe damage (bleeding, ulceration or perforation). Expected to cause burns to the gastrointestinal tract. Aspiration into the lungs may occur during ingestion or vomiting, resulting in lung injury.

SECTION 4 – FIRST AID MEASURES

Eye Contact In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing. Have an ophthalmologist make an evaluation of eye injury.
Skin Contact In case of contact, immediately flush skin with plenty of water for at least 15 minutes. Get medical attention. Remove contaminated clothing and launder before reuse.
Inhalation Remove person to fresh air. If not breathing give artificial respiration. Call a physician.
Ingestion Do NOT induce vomiting. Never give anything by mouth to an unconscious or convulsing person. Seek immediate medical attention. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs.
Notes to Physician Hydrogen peroxide at this concentration is a strong oxidant. Direct contact with the eye is likely to cause corneal damage especially if not washed immediately. Careful ophthalmologic evaluation is recommended and the possibility of local corticosteroid therapy should be considered. Due to the likelihood of corrosive effects on the gastrointestinal tract after ingestion, and the unlikelihood of systemic effects, attempts at evacuating the stomach via emesis induction or gastric lavage should be avoided. There is a remote possibility, however, that a nasogastric or orogastric tube may be required for the reduction of severe distension due to gas formation.

SECTION 5 - FIRE FIGHTING MEASURES

Flammability Yes. May be combustible at high temperature.
Flash Point Will not burn.
Autoignition Temperature Not Available

Extinguishing Media	Do not use CO2 extinguisher on this material; use only water spray or appropriate foam. Do not use organic compounds on this material.
Special Firefighting Procedures	Strong oxidizer. Contact with combustible materials may cause a fire. Release of oxygen may support combustion. Contact with incompatible materials (e.g. metals, alkalis and reducing agents) will cause hazardous decomposition resulting in the release of large quantities of heat, steam and oxygen gas. Exposure to heat may cause hazardous decomposition. A severe detonation hazard may exist when mixed with organic liquids, e.g. kerosene or gasoline. Isolate and restrict area access. Fight fire from a safe distance and from a protected location. Stay upwind. Stop leak only if safe to do so. Containers exposed to intense heat from fires should be cooled with water to prevent vapour pressure build-up which could result in container rupture.
Unusual Fire and Explosion Hazards	Slightly flammable to flammable in presence of organic materials. Spontaneous combustion can occur if allowed to remain in contact with oxidizable materials. Drying of product on clothing or combustible material may cause fire. Do not allow temperature of storage tanks to rise above 38°C (100°F). Do not heat solution to concentrate of 74% or greater. Mixtures with combustible material may be explosive.
Hazardous Combustion Products	Not Available

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal Precautions	Restrict area until completion of clean up. Ensure cleanup is conducted by trained personnel only. Do not touch and walk through spilled material. All individuals dealing with clean up should wear appropriate protective equipment including self-contained breathing apparatus.
Environment Precautions	Prevent entry into sewers or streams, dike if needed.
Spill Response/Cleanup	Restrict access to unprotected personnel. Stop leak only if safe to do so. For small spills, flush area with water. For large spills, dike with earth, sand or inert sorbent material to contain spill. Remove liquid with compatible pumps or vacuum equipment. Place in suitable container for disposal. Flush area with water. Keep materials which can burn away from spilled materials.
Spontaneous Combustion Hazard	Combustible materials exposed to hydrogen peroxide should be immediately submerged in or rinsed with large amounts of water to ensure that all hydrogen peroxide is removed. Residual hydrogen peroxide that is allowed to dry (upon evaporation hydrogen peroxide can concentrate) on organic materials such as paper, fabrics, cotton, leather, wood or other combustibles, can cause the material to ignite and result in a fire.

SECTION 7 – HANDLING AND STORAGE

Handling	Wear chemically resistant protective equipment during handling. Use only in well ventilated areas. Avoid breathing vapour or mist. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Keep away from heat, flame and incompatibles. Keep containers tightly closed when not in use. Empty containers retain residue (liquid and/or vapour) and can be dangerous.
Storage Requirements	Keep out of reach of children. Store in a cool, dry, well-ventilated area. Keep containers tightly closed. Do not store this material in containers made of light metals. Recommended container materials: glass, polyvinyl chloride, polyethylene, ceramics, polypropylene. Use adequate venting devices on all packages, containers and tanks and check correct operation periodically. Do not confine product in unvented vessels or between closed valves. Risk of overpressure and bursting due to decomposition in confined spaces and pipes.

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation	Use process enclosure, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits.
Respiratory Protection	If exposure exceeds occupational exposure limits, use an appropriate NIOSH approved respirator. In case of spill or leak resulting in unknown concentration, use NIOSH approved supplied air respirator.
Skin Protection	Natural rubber gloves. Butyl rubber gloves. Nitrile gloves. Skin Protection: Skin contact should be prevented through the use of suitable protective clothing, gloves and footwear, selected for conditions of use and exposure potential. Consideration must be given both to durability as well as permeation resistance.
Eye/Face Protection	Chemical goggles; also wear a face shield if splashing hazard exists.
Other Comments	Chemical resistant clothing and boots. An eyewash station and safety shower should be available.
General Hygiene	Avoid breathing vapor or mist. Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke while using this product. Upon completion of work, wash hands before eating, drinking, smoking or use of toilet facilities. Remove soiled clothing and wash thoroughly before reuse.

Ingredient	Exposure Limit - ACGIH	Exposure Limit - OSHA	A Immediately Dangerous to Life or Health - IDLH
Hydrogen Peroxide	1 ppm TLV-TWA	1 ppm TWA 1.4 mg/m ³ TWA	75 ppm

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Physical State	:	Liquid
Odour and Appearance	:	Pungent; clear, colourless
Odour Threshold	:	Not Available
Specific Gravity (Water = 1)	:	1.07 – 1.23
Vapour Pressure (mmHg)	:	48 Pa @ 30°C, 86°F
Vapour Density (Air = 1)	:	0.66 – 0.95
Evaporation Rate	:	>1
Boiling Point	:	103– 120°C, 217– 248°F
Freezing/Melting Point	:	-17 – -56°C, 1.4 – 68.8°F
pH	:	0 - 3 [acidic]
Coefficient Water/Oil Distribution	:	Not Available
Solubility in Water	:	Easily soluble in cold water and hot water

SECTION 10 – STABILITY AND REACTIVITY

Stability/Reactivity	This product is stable only when cool and pure.
Conditions for Chemical Instability	Heat, open flame and direct sunlight. Keep away from incompatibles. Keep container tightly closed when not in use.
Hazardous Decomposition Products	Oxygen. Steam.
Hazardous Polymerization	Will not occur.
Incompatible Materials	Metals. Reducing agents. Alkalis. Combustible material. Organic materials. Heavy metals and their salts.
Special Reactivity	Combustible materials exposed to hydrogen peroxide should be immediately submerged in or rinsed with large amounts of water to ensure that all hydrogen peroxide is removed residual hydrogen peroxide that is allowed to dry (upon evaporation hydrogen peroxide can concentrate) on organic materials such as paper, fabrics, cotton, leather, wood, or other combustibles, can cause the material to ignite and result in a fire.

SECTION 11 – TOXICOLOGICAL INFORMATION

Routes of Entry	:	Inhalation, skin and eye contact, ingestion
Skin Contact	:	Corrosive. May cause burns resulting in permanent damage.
Eye Contact	:	Corrosive. May cause conjunctivitis, corneal burns and permanent damage. Symptoms may occur with delay. Concentrations greater than 10% are corrosive to the eye.
Ingestion	:	Avoid swallowing. May cause chemical burns to mouth, throat and stomach. Symptoms may include abdominal pain, vomiting, burns, perforations and bleeding.
Inhalation	:	May cause chemical burns and irritation to the respiratory tract.
Chronic Exposure Effects	:	Prolonged skin exposure may cause severe irritation and white discoloration. Burning may result in localized erythema (redness) or even blistering of the skin. Repeated inhalation exposures produced nasal discharge, bleached hair, and respiratory tract congestion.
Irritancy	:	No Data Available
Sensitization	:	Not Available
Carcinogenicity	:	Not Available
Teratogenicity	:	No Data Available
Mutagenicity	:	Not Available
Reproductive Effects	:	No Data Available

SECTION 12 – ECOLOGICAL INFORMATION

Aqua Toxicity	Under ambient conditions quick hydrolysis, reduction or decomposition occurs. Hydrogen peroxide quickly decomposes to oxygen and water.
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SECTION 13 – DISPOSAL CONSIDERATIONS

Waste Disposal	Dispose in accordance with federal, provincial or local government requirements. Contact your local, provincial or federal environmental agency for specific regulations.
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SECTION 14 – TRANSPORT INFORMATION

**TDG Shipping Regulations
Domestic Substances List**

UN 2014, Hydrogen Peroxide, Aqueous Solution, Class 5.1(8), PG II
All ingredients are listed on the DSL or are not required to be listed.

SECTION 15 – REGULATORY INFORMATION

WHMIS Classification

Class C: Oxidizing Material
Class D1B: Toxic Material
Class E: Corrosive Material
Class F: Dangerously Reactive Material

SECTION 16 – OTHER INFORMATION

Prepared by:

Lab Services
PMC Water Systems Services Inc.
124 Connie Crescent, Unit 9
Concord, ON L4K 1L7

Preparation Date:

January 16, 2017

While all the data presented is believed to be accurate at the time of preparation, PMC Water Systems Services Inc. makes no warranty; the data is offered for your consideration, investigation and verification.