Safety Data Sheet
BioXpool POOL

Date reviewed: 1 February 2024
Replaces: New

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name:	**BioXpool POOL**
Chemical Name:	Stabilized hydrogen peroxide
Synonyms:	
Product Code:	BIOXPOOL5L
Recommended Use of the Chemical and Restrictions on Use:	Spa Pool disinfectant and Sanitiser
Supplier:	HY-CLOR AUSTRALIA PTY LTD
Street Address:	Suite A, Floor 8 Harbourview Building, 152, Quay Street, Auckland Central, Auckland 1010, NZ
Telephone Number:	+6499732477 8.30 – 4.30 pm Monday to Friday
After Hours Contact:	
Facsimile:	0404 859 515 (Aus
Email Contact:	help@hyclor.com.au
Emergency Telephone:	**0800764766** New Zealand National Poisons Centre:(24 hours) **111** (Transport, fire, ambulance only)**)**

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information"

2. HAZARDS IDENTIFICATION

This product is classified as a hazardous substance according to the NZ EPA CCID listing for hydrogen peroxide 8-20% aqueous solution GHS classification. It is also a Dangerous Good.

GHS Category and Hazard Statement(s)

Oxidising liquid – category 2	**H272**	May intensify fire; oxidiser
Acute Toxicity – category 4	**H302**	Harmful if swallowed
Skin corrosion/irritation – category 1B	**H314**	Causes severe skin burns and eye damage
Eye damage/irritation – category 1	**H318**	Causes serious eye damage
Specific target organ toxicity (repeated exposure) - Category 2	**H373**	May cause damage to organs through prolonged or repeated exposure

Precautionary statements
Prevention:

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P220: Keep away from clothing and other combustible materials.

P264: Wash contacted areas thoroughly after handling
P270: Do not eat, drink or smoke when using this product.
P280: Wear eye protection and protective gloves

Response:

P314: Get medical advice/attention if you feel unwell.

P301+P312: Wash hands thoroughly after handling.

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P330: Rinse mouth

P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower

P363: Wash contaminated clothing before reuse.

P304+P340: IF INHALED: Remove person to fresh air and keep 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 so. Continue rinsing.

P310: Immediately call a POISON CENTER or a doctor.

P337+P313: If eye irritation persists: Get medical advice/attention

P370+378: In case of fire: Use water to extinguish.

Storage:

P405: Store locked up.

Disposal

P501: Dispose of contents and container **i**n accordance with local/ regional/ national/ Regulations

GHS Hazard pictograms

GHS Signal word **DANGER**

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	CAS Number	Concentration (% w/w)
hydrogen peroxide solution	7722-84-1	24.5 – 25.9

4. FIRST AID MEASURES

If poisoning occurs, or medical advice needed contact **0800764766** New Zealand National Poisons Centre:(24 hours) or a doctor. Have this SDS when you call.

Swallowed: Do not induce vomiting. Rinse mouth with water (never give anything by mouth to an unconscious person). Seek immediate medical advice.

Skin: Rinse with water. Do not apply (chemical) neutralizing agents. Remove clothing before washing. Take victim to a doctor if irritation persists

Eye: If in eyes, remove contact lenses if present, hold eyes open, flood with water or normal saline solution for several minutes. Take care not to rinse contaminated water into the non-affected eye or onto the face. If irritation occurs seek immediate medical attention.

Inhaled:	Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service..
Note to Physician	Treat symptomatically
First Aid Facilities	Eye wash and normal washroom facilities. First Aid Kit.
Medical Conditions that may be aggravated by exposure	None known..

5. FIRE FIGHTING MEASURES

Fire & Explosion Hazards:	DIRECT FIRE HAZARD. Non combustible. DIRECT EXPLOSION HAZARD. Promotes combustion. Reactions involving a fire hazard: see "Reactivity Hazard" INDIRECT EXPLOSION HAZARD. No data available.. Decomposes slowly on exposure to light: oxidation which increases fire hazard. This reaction is accelerated on exposure to temperature rise and on exposure to impurities.
Extinguishing Media:	EXTINGUISHING MEDIA FOR SURROUNDING FIRES: Preferably: quantities of water. Water spray. Unsuitable extinguishing media : Dry chemical powder. Carbon dioxide.
Fire Fighting:	Exposure to fire/heat: keep upwind. Exposure to fire/heat: have neighbourhood close doors and windows**.** Cool tanks/drums with water spray/remove them into safety. Protection during firefighting: Heat/fire exposure: compressed air/oxygen apparatus..
Flash Point:	Does not burn.
Autoignition Temperature:	Not applicable – does not burn.
Flammability Class:	Does not burn

Hazchem Code: 2P HIN: 58

6. ACCIDENTAL RELEASE MEASURES

Protective equipment: Gloves. Safety glasses. Protective clothing. See "Material-Handling" to select protective clothing.
Emergency procedures: Mark the danger area. No naked flames. Wash contaminated clothes. In case of reactivity hazard: consider evacuation.
Contain released substance, pump into suitable containers. Consult "Material-handling" to select material of containers. Plug the leak, cut off the supply. Dam up the liquid spill. Methods for cleaning up : Take up liquid spill into inert absorbent material, e.g.: sand, earth, vermiculite. Scoop absorbed substance into closing containers. Carefully collect the spill/leftovers. See "Material-handling" for suitable container materials. Spill must not return in its original container. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.

7. HANDLING AND STORAGE

Keep out of the reach of children.

Precautions for safe handling

Remove contaminated clothing immediately. Clean contaminated clothing. Keep the substance free from contamination. Thoroughly clean/dry the installation before use. Do not discharge the waste into the drain. Keep away from naked flames/heat. Observe strict hygiene. Keep container tightly closed. Measure the concentration in the air regularly. Carry operations in the open/under local exhaust/ventilation or with respiratory protection.

Safe storage, including any incompatibilities

KEEP SUBSTANCE AWAY FROM: heat sources.
KEEP SUBSTANCE AWAY FROM: combustible materials. oxidizing agents. reducing agents. (strong) bases. oils-fats. metals. cellulosic materials. organic materials.
Store in a cool area. Keep out of direct sunlight. Store in a dark area. Provide for a tub to collect spills. Keep only in the original container. Meet the legal requirements.
SPECIAL REQUIREMENTS: closing. with pressure relief valve. clean. opaque. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.
SUITABLE PACKAGING MATERIAL: stainless steel. aluminum. synthetic material. glass. MATERIAL TO AVOID: steel. lead. iron. copper. zinc. nickel.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational Exposure Limits: Exposure limits for this product have been established by Worksafe New Zealand for the product ingredients. No special equipment is usually needed when occasionally handling small quantities.

TWA: 1ppm, 1.4 $mg.m^3$

Appropriate Engineering Controls:

Engineering controls and appropriate working operations should be given priority over the use of personal protective equipment. Avoid generating and inhaling dusts. Use in a well-ventilated area only. Keep containers in a well-ventilated area. Local exhaust ventilations system may be required, especially if chlorine gas evolved.

Personal Protective equipment - for manufacturing and bulk handling situations:

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

Skin Protection:

Suitable protective clothing should be worn e.g. cotton overalls and safety shoes. Wear gloves of impervious material such as butyl rubber, natural rubber, polyethylene Viton, nitrile rubber (glove thickness 0.11 mm & breakthrough time > 480 min) that comply with AS/NZS 2126. Final choice of appropriate gloves will vary according to individual circumstances i.e. methods

	of handling or according to risk assessments undertaken.
Eye Protection:	Safety glasses. Final choice of appropriate eye/face protection will vary according to individual circumstances i.e. methods of handling or engineering controls and according to risk assessments undertaken.
Respiratory Protection:	Respiratory protection is not normally necessary.
Personal Hygiene:	Ensure a high level of personal hygiene is maintained when using this product. Always wash hands before eating, drinking, smoking or using the toilet

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical Description & colour:	Colourless liquid.
Odour:	No odour.
Boiling Point:	103 °C
Freezing/Melting Point:	-11 °C
Flammability:	Not flammable.

Upper/lower flammability or explosive limits: No data available

Volatiles:	No data available.
Vapour Pressure:	No data available
Flash point:	Not applicable.
Autoignition temperature:	No data available.
Decomposition Temperature:	No data available.
Vapour Density:	Not applicable t.
Specific Gravity:	1.090 – 1.100 g/cm_3.
Bulk Density:	Not applicable.
Water Solubility:	Soluble in water. Soluble in ethanol. Soluble in ether. Water: Complete
pH:	1.5 – 2.5
Explosive properties:	No data available.
Oxidizing properties:	No data available.
Coeff Oil/water Distribution:	Log -1.36

10. STABILITY AND REACTIVITY

Reactivity:	Decomposes slowly on exposure to light: oxidation which increases fire hazard. This reaction is accelerated on exposure to impurities and on exposure to temperature rise. Reacts with combustible materials, with organic material and with (strong) reducers: (increased) risk of fire/explosion..
Chemical Stability:	Unstable on exposure to air
Possibility of hazardous reactions:	No additional information available
Conditions to avoid:	No additional information available
Incompatible materials:	No additional information available

11. TOXICOLOGICAL INFORMATION

Acute toxicity	LD_{50} oral rat ; 1,193 - 1,27 mg/kg Hydrogen peroxide 35% LD50 dermal rabbit: >2000 mg/kg LC50 inhalation rat (mg/L) 2 mg/l/4h Hydrogen peroxide 100% ATE* Dermal 2000,000 mg/kg ATE* oral 500,000 mg/kg ATE*mist 1500 mg/L4h *Acute Toxicity Classification for Mixture (Acute Toxicity Estimate ATE Method)
Skin corrosion/irritation	Not classified pH: 1.5 – 2.5
Eye damage/eye irritation	Causes Serious eye damage. pH 1.5-2.5
Inhalation	No data available
Skin sensitization	Not classified
Mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
Specific target organ toxicity - single exposure	Not classified
Specific target organ toxicity - repeated exposure – Category 2	May cause damage to organs through prolonged or repeated exposure
Aspiration hazard	Not classified
IARC group	3

12. ECOLOGICAL INFORMATION

LC_{50} fish	16,4 mg/l (96 h; *Pimephales promelas*; Solution >=50%) 37,4 mg/l (96 h; *Ictalurus punctatus*; Solution >=50%)
EC_{50} Daphnia	2,4 mg/l (48 h; *Daphnia pulex*; Solution >=50%)
EC_{50} other aquatic organisms	2,5 mg/l (72 h; *Chlorella vulgaris*)
EC_{50} Daphnia	7,7 mg/l (24 h; *Daphnia magna*; Solution >=50%)
Threshold limit algae	0,1 mg/l (72 h; *Chlorella vulgaris*)

Persistence and degradability: No data available

Bioaccumulative potential: log PoW -1.36

Mobility in soil: No data available

13. DISPOSAL CONSIDERATIONS

Disposal: Rinse empty containers in the pool and dispose of by putting in garbage. For larger quantities, Refer to local government authority for disposal recommendations. Dispose of material through a licensed waste contractor. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

14. TRANSPORT INFORMATION

Consult the Land Transport Rule Dangerous Goods 2005 Rule 45001/2005 As at 1 April 2021 IMDG and ICAO/IATA Codes for all the transport requirements for the specified UN Number.

	Land Transport	**Sea Transport (IMDG)**	**Air Transport (ICAO/IATA)**
UN Number	2014	2984	2984
UN proper shipping name	HYDROGEN PEROXIDE, AQUEOUS SOLUTION with not less than 20% but less than 60% hydrogen peroxide (stabilised as necessary)	HYDROGEN PEROXIDE, AQUEOUS SOLUTION with not less than 20% but less than 60% hydrogen peroxide (stabilised as necessary)	6
Transport Hazard Class	5.1	5.1	5.1
Subsidiary Hazard Class	8	8	8
Packaging Group	II	II (see IMDG Code for details)	II (see IATA Code for details)
Marine Pollutant		No	No
Special Provisions*	-		
Packaging Instruction*	P504		

‘*See NZ Standard 5433: 2021 for details

Hazchem Code: 2P HIN: 58

15. REGULATORY INFORMATION

HSNO Approval Number	Water-Treatment-Chemicals-Oxidising-5.1.1-Group-Standard-2017-HSR002683
Listed in NZIoC	Hydrogen peroxide may be used under an appropriate Group Standard

16. OTHER INFORMATION

Glossary:

CAS Number:	Unique Chemical Abstracts Service Registry Number
GHS:	Globally Harmonized System of classification and labelling of chemicals (GHS)
IARC:	International Agency for Research on Cancer
SDS:	Safety Data Sheet
TWA:	8-hour Time-weighted average (TWA) means the maximum average airborne concentration of a substance when calculated over an eight-hour working day, for a five-day working week.

References:

Hazardous Substances SDS Notice 2017 as consolidated Sept 2022. EPA NZ Inventory of Industrial Chemicals. The exposure standards comply with the New Zealand Workplace Exposure Standards for Airborne Contaminants. The Dangerous Goods Classification complies with the Land Transport Rule Dangerous Goods 2005 Rule 45001/2005 As at 1 April 2021. Other information from the Manufacturers SDS prepared according to Regulation (EC) No. 453/2010.

Sections Revised: All
Replaces revision: New

Disclaimer

This Safety Data Sheet (SDS) has been prepared in compliance with the Hazardous Substances SDS Notice 2017 as consolidated Sept 2022. The information in this SDS should be provided to all who will use, handle, store, transport, or otherwise be exposed to this product. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. 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. It does not represent any guarantee of the properties of the product. Hy-Clor Australia Pty. Limited shall not be held liable for any damage resulting from handling or from contact with the above product.

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