REVISED DATE: **April 2023**
Valid for 5 years from this date.

SAFETY DATA SHEET
SPA PROTECTOR
BACTERIACIDE AND CLARIFIER

1. CHEMICAL PRODUCT/COMPANY NAME

Product Name:	Spa Protector Bactericide & Clarifier
Other Names:	Hydrogen Peroxide, Hydrogen peroxide (H2O2), Hydrogen Peroxide Solution
Chemical Name	Hydrogen Peroxide 20-60%
Chemical Formula	H2O2
Product Use:	For industrial use. For oxidation.
Company Name:	Pool Ranger Pty Ltd Unit 4 / 1 Prosperity Parade Warriewood NSW 2102
Telephone Number:	02 9979 3490
Emergency Number:	For emergencies only; DO NOT contact these companies for general product advice. Poisons Information Centre / Westmead NSW / Ph: 1800 251 525 / Ph: 131 126 Chemcall / Australia / Ph: 1800 127 406 / Ph: +64 4 917 9888

2. HAZARD IDENTIFICATION/CLASSIFICATION

Statement of Hazardous Nature

Hazardous according to the criteria of the Globally Harmonised System of Classification and Labeling of Chemicals (GHS)

Poisons Schedule	6
Hazard Categories:	Oxidising Liquids - Category 2 Acute Toxicity (Oral) - Category 4 Acute Toxicity (Inhalation) - Category 4 Skin Corrosion/Irritation - Category 1B Serious Eye Damage/Irritation - Category 1 Specific Target Organ Toxicity (Single Exposure) - Category 3 Acute Hazard to The Aquatic Environment - Category 2

SIGNAL WORD: DANGER



Hazardous:	H272 May intensify fire; oxidizer. H302 + H332 Harmful if swallowed or if inhaled. H314 Causes severe skin burns and eye damage H335 May cause respiratory irritation. H401 Toxic to aquatic life.
Prevention Statement:	P210 Keep away from heat. P221 Take any precaution to avoid mixing with combustibles. P260 Do not breathe mist/vapour/spray P280 Wear protective gloves/protective clothing/eye protection/face protection. P273 Avoid release to the environment. P273 Avoid release to the environment.

	P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area.
Response:	P370 + P378 In case of fire: Use dry chemical, alcohol resistant foam or dry sand for extinction. P303 + P361 + P353 IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower. P310 Immediately call a POISON CENTER or doctor/physician. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P301+P330+P331 IF SWALLOWED. Rinse mouth. Do NOT induce vomiting. P363 Wash contaminated clothing before resuse. P391 Collect spillage. P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Storage:	P403 + P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up.
Disposal:	P501 Dispose of contents/container in accordance with local / regional / national /international regulations.

National Transport Commission (Australia)
Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Dangerous Goods Classification:	Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	Formula	CAS Number	Proportions (%)
Water	Not available	[7732-18-5]	40.0-80.0%
Hydrogen Peroxide	Not available	[7722-84-1]	20.0-60.0%

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure.

Swallowed:	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a Poison Centre or doctor/physician for advice.
Eye:	IF IN EYES: Immediately flush eyes with running water for several minutes, holding eyelids open and occasionally lifting the upper and lower lids. Immediately call a Poison Centre or doctor/physician for advice. Remove contact lenses if present and easy to do. Continue rinsing for at least 15 minutes.
Skin:	IF ON SKIN: Remove contaminated clothing and shoes immediately. Flush skin with running water for at least 15 minutes. Immediately call a Poison Centre or doctor/physician for advice. Wash contaminated clothing and shoes before reuse.
Inhaled:	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a Poison Centre or doctor/physician for clear advice. Apply resuscitation if victim is not breathing. Administer oxygen if breathing is difficult.
Advice to Doctor:	Keep victim calm and warm. Obtain immediate medical care. Do not leave victim unattended. Risk of pulmonary edema. Ensure that attending medical personnel are aware of identity and nature of the product(s) involved, and take precautions to protect themselves.
Aggravated Medical conditions caused by Exposure:	No information available.

5. FIRE FIGHTING MEASURES	
General Measures:	Evacuate personnel to safe areas; Keep unauthorised/unprotected personnel away. Keep upwind and to higher ground. If safe to do so, move undamaged containers from fire area. Do not move cargo if cargo has been exposed to heat. Hydrogen peroxide in the proximity of an on going fire must be diluted with large volumes of water. Cool containers with water spray until well after fire is out – If impossible, withdraw from area and let fire burn. Use water spray to knock down vapours or divert vapour clouds. Dam fire control water for later disposal.
Flammability Conditions:	OXIDISING SUBSTANCE: The product itself does not burn: However, will accelerate burning when involved in a fire. Product is fire-stimulating.
Extinguishing Media:	In case of fires involving substantial quantities of Hydrogen peroxide, use flooding quantities of water for extinction – Do NOT use organic compounds, i.e. dry chemicals, Carbon dioxide (CO2) or foam. For fires involving small amounts of Hydrogen peroxide, adapt fire extinguishing measures to surroundings.
Fire and Explosion Hazard:	Risk of violent reaction or explosion: May explode from heating, shock, friction or contamination. May ignite combustibles. Drying of product on clothing or combustible materials, such as paper, fabrics, leather or wood may cause fire. Mixtures of Hydrogen peroxide with flammable liquids (solvents) may possess explosive properties. Containers may explode when heated. Runoff may create fire or explosion hazard.
Hazardous Products of Combustion:	Fire may produce irritating, toxic and/or corrosive gases.
Special Fire Fighting Instructions:	Contain runoff from fire control or dilution water – Runoff may create fire or explosion hazard and may pollute waterways.
Personal Protective Equipment:	Liquid-tight chemical protective clothing (splash suit) in combination with self-contained breating apparatus (SCBA) should be used. Structural firefighter's uniform will provide limited protection.
Flash Point:	Does not flash.
Lower Explosion Limit:	Hydrogen peroxide vapours (by weight): >40%
Upper Explosion Limit:	No Data Available
Auto Ignition Temperature:	No Data Available
Hazchem Code:	2P

6. ACCIDENTAL RELEASE MEASURES	
General Response Procedure:	Ensure adequate ventilation. Prevent exposure to heat. ELIMINATE all ignition sources. Do not contaminate – Keep combustibles (wood, paper, clothing, oil, etc.) away from spilled material.
Clean Up Procedures:	Large spill: Collect (pump) product into suitable containers using appropriate equipment or use a non-combustible material (e.g. vermiculite, sand or earth) to soak up the product and place it in a suitable, labelled containers for disposal (see SECTION 13). Small spill: Dilute product with lots of water and rinse away. – Do NOT seal defective containers or waste receptacles air tight (danger of bursting due to product decomposition). NEVER return spilled product into original container for reuse (risk of decomposition).
Containment:	Stop leak if safe to do so – Prevent entry into waterways, drains or confined areas. Isolate defective containers immediately and place into a plastic waste receptacle. Use water spray to knock down vapours or divert vapour clouds.
Decontamination:	Rinse away residues with plenty of water – Dilute with large amounts of water to a concentration of about 5% Hydrogen peroxide; hold in diked area or pond until peroxide is completely decomposed or dispose of according to local regulations. Clean contaminated surface thoroughly. - Combustible materials exposed to Hydrogen peroxide should be immediately submerged in or rinsed with large amounts of water to ensure all Hydrogen is removed. Residual Hydrogen peroxide that is allowed to dry on organic materials (such as wood, paper, clothing etc) can cause the material to ignite.
Environmental Precautionary Measures:	Spillages and decontamination runoff may be washed to drains with large quantities of water. Due care must be exercised to avoid unnecessary pollution of watercourses.
Evacuation Criteria:	Spill or leak area should be isolated immediately. Keep unauthorized personnel away. Keep upwind and to higher ground. Large spill: Consider downwind evacuation.
Personal Precautionary Measures:	Do NOT touch damaged containers or spilled material unless wearing appropriate protective clothing as listed in section 8.

7. HANDLING AND STORAGE

Handling:	Safety showers and eyewash facilities should be provided within the immediate work area for emergency use. Ensure adequate ventilation – Use only outdoors or in a well-ventilated area. Handle in accordance with good industrial hygiene and safety practice. Do not breathe mist/vapours/spray and prevent contact with eyes, skin and clothing. Use personal protective equipment as required (see SECTION 8); Remove contaminated clothing immediately and rinse with large amounts of water. OXIDISING SUBSTANCE: Keep away from heat and sources of ignition – No smoking. Do not contaminate – Take any precaution to avoid mixing with combustibles/organic materials. Never return spilled product into its original container for reuse (risk of decomposition). Prior to first filling or operation of a tank installation, all parts of the facility, including all pipes, must be thoroughly cleaned and flushed through. Metal elements of the installation must first be picked and passivated sufficiently. Avoid release to the environment.
Storage:	Store in a cool, dry and well-ventilated place, out of direct sunlight. Keep/store container in upright position only and closed to avoid leakage when not in use. Do not confine product in un-vented vessels or between closed valves – Rick of over-pressure and bursting due to decomposition in confined spaces and pipes. Keep away from heat and sources of ignition – No smoking. Keep/store away from combustible/flammable substances. Keep away from organic and incompatible materials (See SECTION 10). Store locked up. – Maximum storage temperature <=40°C.
Container:	Keep only in the original container or containers specifically permitted for Hydrogen peroxide, i.e. Stainless steel, 1.4571 or 1.451, passivated; aluminium, min. 99.5% passivated; aluminium magnesium alloys, passivated; polyethylene, polypropylene, polyvinyl chloride (PVC); polytetrafluoroethylene; glass, ceremics. Do not store in Iron, Mild steel, Copper, Bronze, Brass, Zinc, Tin. Use adequate venting devices on all packages, containers and tanks; check correct operation periodically. Packages, containers and tanks should be regularly checked for any signs of abnormality, e.g. corrosion, bulging, temperature increase, etc.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

General:	COMPONENT: Hydrogen peroxide (CAS No. 7722-): - Safe Work Australia Exposure Standard: TWA = 1 ppm (1.4 mg/m3) - New Zealand WES: TWA = 1 ppm (1.4 mg/m3). - NIOSH REL?OSHA PEL: TWA = 1 ppm (1.4 mg/m3). - Immediately dangerous to life or health (IDLH) concentration: 75 ppm.
Exposure Limits:	No Data Available.
Biological Limits:	No information available.
Engineering Measures:	A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.
Personal Protection Equipment:	- Respiratory protection: Wear respiratory protection in case of inadequate ventilation and/or large amounts are released and workplace exposure limit may be exceeded. Recommended: Filter type SA – supplied air. - Eye/face protection: Wear appropriate eye protection to prevent eye contact. Recommended: Chemical splash goggles and face-shield. - Hand protection: Wear protective gloves. Recommended: Impermeable gloves, e.g Butyl rubber (0.7mm), Break through time: >480min; Natural rubber/NR (1mm), Break through time >120min; Nitrile (0.33mm), Break through time <33min. A hazard assessment should be conducted prior to use to ensure suitability of gloves for specific work environments and processes prior to use. - Skin/body protection: Wear appropriate personal protective clothing to prevent skin contact. Recommended: Acid-proof protective clothing, e.g. PVC, neoprene, nitrile rubber, rubber; Full chemical splash suit (PVC); Rubber or plastic boots. To identify additional PPE requirements, it is recommended that a hazard assessment be conducted before using this product.

Special Hazards Precautions:	Avoid protective gloves, clothes and shoes made from Leather. Completely submerge Hydrogen peroxide contaminated clothing or other materials in water prior to drying. Residual Hydrogen peroxide, if allowed to dry on materials such as paper, fabrics, cotton, leather, wood or other combustibles, can cause the material to ignite.
Work Hygienic Practices:	Do not eat, drink or smoke when using this product. Wash face and hands before breaks and end of work. Remove contaminated clothing and shoes immediately and rinse with large amounts of water.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid
Appearance:	Liquid.
Odour:	Stinging
Colour:	Colourless
pH:	>1-4
Vapour Pressure:	2.99 hPa (Hydrogen peroxide, 100%) (@ 25°C)
Relative Vapour Density:	Not Data Available
Boiling Point:	Approx.. 114°C
Melting Point:	-52.2°C
Freezing Point:	No Data Avaialble
Solubility:	Miscible with water
Specific Gravity:	1.1914
Flash Point:	Does not flash.
Auto Ignition Temp:	No Data Available
Evaporation Rate:	No Data Available
Bulk Density:	No Data Available
Corrosion Rate:	No Data Available
Decomposition Temp:	No Data Available
Density:	1.196 g/cm3
Specific Heat:	No Data Available
Molecular Weight:	34.02 g/mol
Net Propellant Weight:	No Data Available
Octanol Water Coefficient:	Low Pow: -1.57 (Hydrogen peroxide, 100%)
Particle Size:	No Data Available
Partition Coefficient:	No Data Available
Saturated Vapour Concentration:	No Data Available
Vapour Temperature:	No Data Available
Viscosity:	1.17 mPa.s.(@ 20°C)
Volatile Percent:	No Data Available
VOC Volume:	No Data Available
Additional Characteristics:	Surface tension: approx.. 75.68 mN/m (20°C).
Potential for Dust Explosion:	Not applicable.
Fast or Intensely Burning Characteristics:	No Data Available
Flame Propagation or Burning Rate of Solid Materials:	No Data Available
Non-Flammables That Could Contribute Unusual Hazards to a Fire:	No Data Available
Properties That May Initiate or Contribute to Fire Intensity	OXIDISING SUBSTANCE: The product itself does not burn; However, will accelerate burning when involved in a fire. Product is fire-stimulating.
Reactions That Release Gases or Vapours.	Fire may product irritating, toxic and/or corrosive gases.
Release of Invisible Flammable Vapours and Gases:	No Data Available

10. STABILITY AND REACTIVITY

General Information	Product is a(n) oxidizing agent and reactive. Unstable in the presence of incompatible materials
Chemical Stability	Stable under recommended storage conditions. Commercial products are stabilised to reduce risk of decomposition due to contamination.
Conditions to Avoid:	Sun rays, heat, heat effect.
Materials to Avoid:	Reacts violently with reducing agents, alcohols, ammonia, carboxylic acids, acetic acid, cobalt oxides, copper(II) chloride, ethers, metal powder, permanganates, acetone, benzenesulfonic anhydride, 1,1-dimethylhydrazine, dimethylphenylphosphine, gadolinium hydroxide, hydrogen selenide, iron oxides, lithium tetrahydroaluminate, magnesium tetrahydroaluminate, manganese(II) oxide, mercury oxide, methyl hydrazine, nickel monoxide, nitrogenous bases, osmium tetraoxide, alpha-phenylselenoketones, phosphorus, phosphorus(V) oxide, quinoline, tetrahydrothiophene, tin(II) chloride, thiodiglycol, thiophane, tin(II) chloride, unsaturated organic compounds, readily oxidisable and combustible materials; avoid contact with combustibles including lubricants and graphite. reacts with cobalt, copper and its alloys, chromium, iridium, iron, lead, manganese, Monel, osmium, palladium, platinum, gold, silver, zinc, and other catalytic metals, metal oxides and salts - avoid metallic bowls and stirrers. violent catalytic decomposition will occur in contact with certain metals such as iron, copper, chromium, brass, bronze, lead, silver, manganese or their salts. forms unstable and possible explosive materials with acetic anhydride, aconitic acid, aniline, carboxylic acids, 1,4-diazabicyclo[2,2,2]octane, diphenyl diselenide, ethyl acetate, glycols, ketene, ketones, triethyltin hydroperoxide, 1,3,5-trioxane, vinyl acetate. Is incompatible with mercurous chloride decomposes in presence of alkalis and even ordinary dust or rust decomposes slowly at ordinary temperatures and builds up pressure in a closed container; the rate of decomposition doubles for each 10 deg C rise in temperature and decomposition becomes self-sustaining at 141 deg. C contact with rough surfaces can cause decomposition. Attacks and may ignite some plastics, rubber and coatings. Avoid any contamination of this material as it is very reactive and any contamination is potentially hazardous.
Hazardous Decomposition Products:	Solutions of hydrogen peroxide slowly decompose, releasing oxygen, and so are often stabilised by the addition ofacetanilide, etc.
Hazardous Polymerisation:	Hazardous polymerisation will not occur.

11. TOXICOLOGICAL INFORMATION

General Information:	dermal (rat) LD50: 3000-5480 mg/kg Inhalation (rat) LC50: 2 mg/L/4H Oral (rat) LD50: 75 mg/kg Acute inhalation toxicity: LC50 rat: > 0.17 mg/l / 4 h. Method: literature. Test substance: hydrogen peroxide, 50%. The maximum dose attainable under experimental conditions no fatalities. Acute dermal toxicity: LD50 rabbit: > 6500 mg/kg. Method: literature. Test substance: Hydrogen peroxide 70%. Skin irritation rabbit: Slightly irritating. Method: literature Eye irritation rabbit: Corrosive. Method: literature Sensitization guinea pig: Not sensitising. Method: literature Repeated dose toxicity: Mouse(female): Testing period: 90 d. Subsequent observation period: 6 weeks. Target organ/effect: Changes of parameters of the blood, body weight development negative. Irritative effect: Gastrointestinal tract. Method: OECD TG 408. Drinking water analysis. Mouse(male): Testing period: 90 d. Subsequent observation period: 6 weeks. Target organ/effect: Changes of parameters of the blood, body weight development negative. Irritative effect: Gastrointestinal tract. Method: OECD TG 408. Drinking water analysis.

	Gentoxicity in vitro Microorganisms, cell cultures. Mutagenic/genotoxic effects. Method: literature. In the presence of metabolic systems no mutagenic effects were observed. Gentoxicity in vivo Micronucleus test mouse intraperitoneal (i.p.: Negative. Method: OECD TG 474 Micronucleus test mouse Oral: Negative. Method: literature Unscheduled DNA synthesis -test (UDS) rat: Negative. Method: literature Carcinogenicity assessment. Clues to possible carcinogenic effects in animal experiments: Up to date there is no evidence of increased tumor risk. Hydrogen peroxide is not a carcinogenic substance according to MAK, IARC, NTP, OSHA, ACGIH.
Eye Irritant:	Hydrogen peroxide concentrations above 10% are corrosive to the eye and may cause corneal ulceration even days after exposure. The material can produce chemical burns to the eye following direct contact. Vapours or mists may be extremely irritating.
Ingestion:	Accidental ingestion of the material may be harmful; animal experiments indicate that ingestion of less than 150 gram may be fatal or may produce serious damage to the health of the individual. Hydrogen peroxide may cause blistering and bleeding from the throat and stomach. When swallowed, it may release large quantities of oxygen which could hyper-distend the stomach and gut and may cause internal bleeding, mouth and throat burns and rupture of the gut. There may also be fever, nausea, foaming at the mouth, vomiting, chest and stomach pain, loss of consciousness, and movement disorders and death. Large amounts can also cause cessation of breath, dizziness, headache, tremors weakness or numbness in the extremities and convulsions. Hydrogen peroxide concentrate is corrosive and must not be taken undiluted. The material can produce severe chemical burns within the oral cavity and gastrointestinal tract following ingestion.
Inhalation:	Inhalation of aerosols (mists, fumes), generated by the material during the course of normal handling, may be harmful. Inhalation of quantities of liquid mist may be extremely hazardous, even lethal due to spasm, extreme irritation of larynx and bronchi, chemical pneumonitis and pulmonary oedema. Inhaling excessive levels of mist may result in headache, dizziness, vomiting, diarrhoea, irritability, sleeplessness and fluid in the lungs, and cause extreme irritation of the nose and chest, cough, discomfort, shortness of breath and inflammation of the nose and throat. Whole-body effects of hydrogen peroxide poisoning include tremor, numbness of the limbs, convulsions, coma and shock. Hydrogen peroxide has poor warning properties.
Skin Irritant:	Skin contact will result in rapid drying, bleaching, leading to chemical burns on prolonged contact. Reactions may not occur on exposure but response may be delayed with symptoms only appearing many hours later. Open cuts, abraded or irritated skin should not be exposed to this material. Entry into the blood-stream, via, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected. The material can produce chemical burns following direct contact with the skin.
Chronic Other:	Hydrogen peroxide as a human food additive is generally regarded as safe when used in certain limitations. In experimental animals, oral administration of hydrogen peroxide causes dental, liver, kidney, stomach, and intestinal damage. Inhalation exposure to hydrogen peroxide caused skin irritation and sneezing in dogs, and high mortality in mice. Hydrogen peroxide added to food is affirmed to be generally regarded as safe (GRAS) by the U.S. FDA when used to treat certain foods in specified limitations [FDA 21 CFR 184.1366 (4/1/93)]. Hydrogen peroxide may be used as a component of articles for use in packaging, handling, transporting, or holding food in accordance with prescribed conditions [FDA 21 CFR 175.105 (4/1/93)]. Dose-related growth retardation, induction of dental caries, and pathological changes in the periodontium were observed in young male rats receiving 1.5% hydrogen peroxide as their drinking fluid (equivalent to approximately 2.1 g/kg/day)2 for 8 weeks. Effects observed in mice treated for 35 weeks with 0.15% hydrogen peroxide as their drinking fluid (equivalent to approximately 0.29 g/kg/day)3 included degeneration of hepatic and renal tubular epithelial tissues, necrosis, inflammation, irregularities of tissue structure of the stomach wall, and hypertrophy of the small intestine wall. Concentrations in excess of 1% (equivalent to approximately 1.9 g/kg/day)4 resulted in pronounced weight loss and death within two weeks. In a sequential study of mice treated with 0.4% hydrogen

	peroxide in drinking water (equivalent to approximately 0.76 g/kg/day)5 , gastric erosion was observed at 30 days and was present consistently throughout the 108 week study period. Dogs exposed 6 hours/day, 5 days/week for 6 months at an average vapour concentration of 7 ppm (9.73 mg/3) of 90% hydrogen peroxide, developed skin irritation, sneezing, lacrimation, and bleaching of the hair. Autopsy disclosed pulmonary irritation and greatly thickened skin, but no hair follicle destruction. No significant changes in blood or urinary parameters were observed . Following eight 6-hour exposures to hydrogen peroxide at a concentration of 79 mg/m3 (56.88 ppm), 7/9 mice died. Following exposure to hydrogen peroxide at 93 mg/m3, 6 hours/day, 5 days/week for 30 exposures, 1/10 rats died. Repeated or prolonged exposure to acids may result in the erosion of teeth, swelling and/or ulceration of mouth lining. Irritation of airways to lung, with cough, and inflammation of lung tissue often occurs.
Carcinogen Category:	No Data Available

12. ECOLOGICAL INFORMATION

Ecotoxicity:	Toxicity to fish: Hydrogen peroxide LC50 96 Fish 0.020mg/L Hydrogen peroxide EC50 3 Algae or other aquatic plants 0.27mg/L Hydrogen peroxide EC50 48 Crustacea 2.32mg/L Hydrogen peroxide EC50 72 Algae or other aquatic plants 0.71mg/L Hydrogen peroxide NOEC 192 Fish 0.028mg/L
Persistence/Degradability:	Photochemical degradation (air) takes place. Under ambient conditions quick hydrolysis, reduction or decomposition occurs. The following substances are formed: oxygen and water.
Mobility:	Hydrogen peroxide LOW (KOC = 14.3)

Environmental Fate:	Do NOT let product reach waterways, drains and sewers.
Bioaccumulation Potential:	Hydrogen peroxide LOW (LogKOW = -1.571)
Environmental Impact:	No Data Available

13. DISPOSAL CONSIDERATIONS

General Information:	Dispose of in accordance with all local, state and federal regulations. All empty packaging should be disposed of in accordance with Local, State, and Federal Regulations or recycled/reconditioned at an approved facility.
Special Precautions for Landfill or Incineration:	Contact a specialist disposal company or the local waste regulator for advice.

14. TRANSPOPRT INFORMATION

Land Transport (Australia)
ADG Code
Proper Shipping Name HYDROGEN PEROXIDE, AQUEOUS SOLUTION with not less than 20% but not more than 60% hydrogen peroxide (stabilized as necessary)
Class 5.1 Oxidising Substances
Subsidiary Risk(s) 8 Corrosive Substances

  

EPG 31 Oxidizing Substances
UN Number 2014
Hazchem 2P
Pack Group II
Special Provision No Data Available

Sea Transport
IMDG Code
Proper Shipping Name HYDROGEN PEROXIDE, AQUEOUS SOLUTION with not less than 20% but not more than 60% hydrogen peroxide (stabilized as necessary)
Class 5.1 Oxidising Substances

		

Subsidiary Risk(s) 8 Corrosive Substances
UN Number 2014
Hazchem 2P
Pack Group II
Special Provision No Data Available
EMS F-H, S-Q
Marine Pollutant Yes

Air Transport
IATA DGR
Proper Shipping Name HYDROGEN PEROXIDE, AQUEOUS SOLUTION with not less than 20% but not more than 60% hydrogen peroxide (stabilized as necessary)
Class 5.1 Oxidising Substances
Subsidiary Risk(s) 8 Corrosive Substances

		

UN Number 2014
Hazchem 2P
Pack Group II
Special Provision No Data Available
Comments FORBIDDEN FOR AIR TRANSPORT

National Transport Commission (Australia)
Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)
Dangerous Goods Classification Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

15. REGULATORY INFORMATION

General Information HYDROGEN PEROXIDE

Poisons Schedule (Aust) Schedule 6

National/Regional Inventories

Australia (AICS) Listed

Canada (DSL) Listed

Canada (NDSL) Not Determined

China (IECSC) Listed

Europe (EINECS) Not Determined

Europe (REACh) Not Determined

Japan (ENCS/METI) Not Determined

Korea (KECI) Listed

Malaysia (EHS Register) Not Determined

New Zealand (NZIoC) Listed

Philippines (PICCS) Listed

Switzerland (Giftliste 1) Not Determined

Switzerland (Inventory of Notified Substances) Not Determined

Taiwan (NCSR) Not Determined

USA (TSCA) Listed

16. OTHER INFORMATION

Related Product Codes	HYPERA1000, HYPERA2000, HYPERA2001, HYPERA2500, HYPERA2600, HYPERA3000, HYPERA3400, HYPERA3500, HYPERA3600, HYPERB5000, HYPERB5001,HYPERB5050, HYPERB5100, HYPERB6000, HYPERB6001, HYPERB6002, HYPERC1000, HYPERC9900, HYPERD3500, HYPERD4900, HYPERD5000, HYPERD5001, HYPERD5002, HYPERD5003, HYPERD5004, HYPERD5005, HYPERD5006, HYPERD5007, HYPERD5008, HYPERD5009, HYPERD5100, HYPERD5101,HYPERD5200, HYPERD5201, HYPERD5500, HYPERD5501, HYPERD5502, HYPERD5503, HYPERD5504, HYPERD5505, HYPERD5506, HYPERD5507, HYPERD5508, HYPERD6000, HYPERD6001, HYPERD6003, HYPERD6100, HYPERD6200, HYPERD6400, HYPERD7000, HYPERD7001, HYPERD7150, HYPERD7200, HYPERD9000, HYPERE1000, HYPERE3500, HYPERE5000, HYPERE5001, HYPERE5500, HYPERF1000, HYPERF1500, HYPERF5000, HYPERF5500, HYPERF5501, HYPERL1800, HYPERL1900, HYPERL2000, HYPERL2600, HYPERL2700, HYPERL2701, HYPERL2750, HYPERL2800, HYPERL2900, HYPERL3000, HYPERL3500, HYPERL3501, HYPERL3502, HYPERL3503, HYPERL3504, HYPERL3505, HYPERL3506, HYPERL3507, HYPERO0400, HYPERO0500, HYPERO0501, HYPERO1000, HYPERO1001, HYPERO1002, HYPERO1003, HYPERO1004, HYPERO1005, HYPERO1006, HYPERO1007, HYPERO1008, HYPERO1009, HYPERO1010, HYPERO1011, HYPERO1012, HYPERO1013, HYPERO1014, HYPERO1015, HYPERO1016, HYPERO1017, HYPERO1018, HYPERO1019, HYPERO1020, HYPERO1021, HYPERO1022, HYPERO1023, HYPERO1024, HYPERO1025, HYPERO1026, HYPERO1027, HYPERO1028, HYPERO1029, HYPERO1030, HYPERO1031, HYPERO1032, HYPERO1033, HYPERO1034, HYPERO1500, HYPERO1800, HYPERO1801, HYPERO1802, HYPERO1803, HYPERO1804, HYPERO1805, HYPERO1806, HYPERO1807, HYPERO1808, HYPERO1809, HYPERO1810, HYPERO1811, HYPERO1812, HYPERO1813, HYPERO1814, HYPERO1815, HYPERO1816, HYPERO1817, HYPERO1818, HYPERO1819, HYPERO1820, HYPERO1820, HYPERO1821, HYPERO1822, HYPERO1823, HYPERO1824, HYPERO1825, HYPERO1826, HYPERO1827, HYPERO1828, HYPERO1829, HYPERO1830, HYPERO1831, HYPERO1832, HYPERO1833, HYPERO1834, HYPERO1835, HYPERO1836, HYPERO1837, HYPERO1838, HYPERO1839, HYPERO1840, HYPERO1841, HYPERO1842, HYPERO1843, HYPERO1844, HYPERO 1845, HYPERO1846, HYPERO1847, HYPERO1848, HYPERO1849, HYPERO1850, HYPERO1851, HYPERO1852, HYPERO1853, HYPERO1854, HYPERO1855, HYPERO2000, HYPERO2001, HYPERO2050, HYPERO2055, HYPERO2056, HYPERO2200, HYPERO2500, HYPERO3000, HYPERO3500, HYPERO4000, HYPERO5000, HYPERO5001, HYPERO5002, HYPERO5003, HYPERO5004, HYPERO5005, HYPERO5006, HYPERO5007, HYPERO5008, HYPERO5009, HYPERO5010, HYPERO5100, HYPERO5500, HYPERO6000, HYPERO6003, HYPERO6005, HYPERO6060, HYPERO6100, HYPERO6200, HYPERO7000, HYPERO7100, HYPERO7200, HYPERO7506, HYPERT3500, HYPERT4000, HYPERT4100, HYPERT4500, HYPERT4900, HYPERT5000,

	HYPERT5001, HYPERT5100, HYPERT5200, HYPERT5300, HYPERT5400, HYPERT5500, HYPERT5600, HYPERT5700, HYPERT5800, HYPERT5900, HYPERT6000, HYPERT6001, HYPERT6002, HYPERT6003, HYPERT6100, HYPERT6200, HYPERT6201, HYPERT6202, HYPERT6205, HYPERT6206, HYPERT6500, HYPERT6501, HYPERT7000, HYPERV5000, HYPERV6000
Revision	3
Revision Date	12 Apr 2016
Reason for Issue	SDS updated
Key/Legend	**<** Less Than Greater Than **AICS** Australian Inventory of Chemical Substances atm Atmosphere **CAS** Chemical Abstracts Service (Registry Number) **cm²** Square Centimetres **CO2** Carbon Dioxide **COD** Chemical Oxygen Demand **deg C (°C)** Degrees Celcius **EPA (New Zealand)** Environmental Protection Authority of New Zealand **deg F (°F)** Degrees Farenheit **g** Grams **g/cm³** Grams per Cubic Centimetre **g/l** Grams per Litre **HSNO** Hazardous Substance and New Organism **IDLH** Immediately Dangerous to Life and Health immiscible Liquids are insoluble in each other. **inHg** Inch of Mercury **inH2O** Inch of Water **K** Kelvin **kg** Kilogram **kg/m³** Kilograms per Cubic Metre **lb** Pound **LC50** LC stands for lethal concentration. LC50 is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours. **LD50** LD stands for Lethal Dose. LD50 is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals. **ltr or L** Litre **m³** Cubic Metre **mbar** Millibar **mg** Milligram **mg/24H** Milligrams per 24 Hours **mg/kg** Milligrams per Kilogram **mg/m³** Milligrams per Cubic Metre **Misc or Miscible** Liquids form one homogeneous liquid phase regardless of the amount of either component present. **mm** Millimetre **mmH2O** Millimetres of Water **mPa.s** Millipascals per Second **N/A** Not Applicable **NIOSH** National Institute for Occupational Safety and Health **NOHSC** National Occupational Health and Safety Commission **OECD** Organisation for Economic Co-operation and Development **Oz** Ounce **PEL** Permissible Exposure Limit **Pa** Pascal **ppb** Parts per Billion **ppm** Parts per Million **ppm/2h** Parts per Million per 2 Hours **ppm/6h** Parts per Million per 6 Hours **psi** Pounds per Square Inch

	R Rankine **RCP** Reciprocal Calculation Procedure **STEL** Short Term Exposure Limit **TLV** Threshold Limit Value **tne** Tonne **TWA** Time Weighted Average **ug/24H** Micrograms per 24 Hours **UN** United Nations **wt** Weight

THIS SDS SUMMARISES OUR BEST KNOWLEDGE OF THE HEALTH AND SAFETY HAZARD INFORMATION OF THE PRODUCT AND HOW TO SAFELY HANDLE AND USE THE PRODUCT IN THE WORKPLACE. EACH USER MUST REVIEW THIS SDS IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE. IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THIS COMPANY SO WE CAN ATTEMPT TO OBTAIN ADDITIONAL INFORMATION FROM OUR SUPPLIERS OUR RESPONSIBILITY FOR PRODUCTS SOLD IS SUBJECT TO OUR STANDARD TERMS AND CONDITIONS, A COPY OF WHICH IS SENT TO OUR CUSTOMERS AND IS ALSO AVAILABLE ON REQUEST.

PLEASE READ ALL LABELS CAREFULLY