water, the liquid of life

SAFETY DATA SHEET

PEROXSIL395 1L x 10 CI5.1

Infosafe No.: LPXCO
Issued Date: 27/06/2014
Issued by: WATERCO LIMITED

1. IDENTIFICATION

GHS Product Identifier
PEROXSIL395 1L x 10 CI5.1

Product Code
348390 1Ltx10

Company Name
WATERCO LIMITED

Address
36 South Street Rydalmere
NSW 2116 Australia

Telephone/Fax Number
Tel: 61 2 9898 8600

Emergency phone number
Australia 1800 638 556 land line for transport by air and sea +61 438 465960/ New Zealand 0800 154 666 land line for transport by air and sea +64 962 390 85

Recommended use of the chemical and restrictions on use
Water Sanitation.

Other Names

Name	Product Code
PEROXSIL395 5Lx3L CI5.1	348391
PEROXSIL395 15L CI5.1	348392
PEROXSIL 1L	348388
PEROXSIL 5L	348389

2. HAZARD IDENTIFICATION

GHS classification of the substance/mixture
Classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia
Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

Oxidizing Liquids: Category 2
Acute Toxicity - Inhalation: Category 4
Acute Toxicity - Oral: Category 4

Eye Damage/Irritation: Category 1
Skin Corrosion/Irritation: Category 1B
STOT Single Exposure Category 3 (respiratory tract irritation)

Signal Word (s)
DANGER

Hazard Statement (s)
H272 May intensify fire; oxidiser.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.

Precautionary Statement (s)
P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P103 Read label before use.

Pictogram (s)
Flame over circle, Corrosion, Exclamation mark

Precautionary statement – Prevention
P210 Keep away from heat/sparks/open flames/hot surfaces, No smoking.
P220 Keep/Store away from clothing/ combustible materials.
P221 Take any precaution to avoid mixing with combustibles.
P260 Do not breathe fume/gas/mist/vapours/spray.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statement – Response
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 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.
P363 Wash contaminated clothing before reuse.
P370+P378 In case of fire: Use carbon dioxide, dry chemical, foam, water fog or water mist for extinction.

Precautionary statement – Storage
P405 Store locked up.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.

Precautionary statement – Disposal
P501 Dispose of contents/container to an approved waste disposal plant.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Name	CAS	Proportion
Hydrogen peroxide	7722-84-1	30-60 %
Ingredients determined not to be hazardous		Balance

4. FIRST-AID MEASURES

Inhalation
If inhaled, remove affected person from contaminated area. Apply artificial respiration if not breathing. Seek medical attention.

Ingestion
Urgent hospital treatment is likely to be needed. Do not induce vomiting. Wash out mouth thoroughly with water. Seek immediate medical attention.

Skin
Remove all contaminated clothing immediately. Wash gently and thoroughly with water and non-abrasive soap for 15 minutes. Ensure contaminated clothing is washed before re-use or discard. Seek immediate medical attention.

Eye contact
If in eyes, hold eyelids apart and flush the eyes continuously with running water. Remove contact lenses. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Seek immediate medical attention.

First Aid Facilities
Eyewash, safety shower and normal washroom facilities.

Advice to Doctor
Treat symptomatically.

Other Information
For advice in an emergency, contact a Poisons Information Centre or a doctor at once. (131 126)

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Carbon dioxide, dry chemical, foam, water fog or water mist.

Unsuitable Extinguishing Media
Do not use water jet.

Hazards from Combustion Products
Non combustible material. Will release oxygen when heated, intensifying a fire.

Specific Hazards Arising From The Chemical
A strong oxidising agent. Contact with combustible material may cause fire. Non combustible, but may support the combustion of other materials.

Hazchem Code
2P

Decomposition Temperature
>50°C

Precautions in connection with Fire
Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) operated in positive pressure mode. In case of fire the product may be violently or explosively reactive. Use water spray to disperse vapours. This product should be prevented from entering drains and watercourses.

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures
Evacuate all unprotected personnel. Do not allow contact with skin and eyes. Do not breathe mist/vapour. It is essential to wear self-contained breathing apparatus (S.C.B.A) and full personal protective equipment and clothing to prevent exposure. Avoid exposure to spillage by collecting the material using vacuum and transfer into suitable labelled containers for subsequent recycling or disposal. Dispose of waste according to applicable local and national regulations. If contamination of sewers or waterways occurs inform the local water and waste management authorities in accordance with local regulations.

7. HANDLING AND STORAGE

Precautions for Safe Handling
Oxidizing and corrosive liquid. Attacks skin and eyes. Causes burns. Avoid breathing in vapours, mist or fumes. Wear suitable protective clothing, gloves and eye/face protection when mixing and using. Use in designated areas with adequate ventilation. Keep containers tightly closed. Ensure a high level of personal hygiene is maintained when using this product, that is, always wash hands after handling, and before eating, drinking, smoking or using the toilet facilities.

Conditions for safe storage, including any incompatabilities
Oxidising and corrosive liquid. Store in a cool dry well-ventilated area. Store in a cool, dry well-ventilated area away from foodstuffs, clothing, combustible and incompatible materials. Protect from contamination - Use only very clean containers and equipment free from traces of impurities. Keep only in original container. Never return unused product to original container. Do not reuse empty packaging to store other products. Keep containers closed when not in use, securely sealed and protected against physical damage. Inspect regularly for deficiencies such as damage or leaks. Provide a catch-tank in a bunded area. Ensure that storage conditions comply with applicable local and national regulations. Have appropriate fire extinguishers available in and near the storage area. For information on the design of the storeroom reference should be made to Australian Standard AS 4326 The storage and handling of oxidizing agents. For information on the design of the storeroom, reference should be made to Australian Standard AS 3780 The storage and handling of corrosive substances.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limit values
Safe Work, Australia Exposure Standards:

Substance	TWA		STEL		NOTICES
	ppm	mg/m³	ppm	mg/m³	
Hydrogen peroxide	1	1.4	-	-	-

TWA (Time Weighted Average): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day week.
STEL (Short Term Exposure Limit): The average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight-hour workday.

Biological Limit Values
No biological limit allocated.

Appropriate Engineering Controls
This substance is hazardous and should be used with a local exhaust ventilation system, drawing vapours away from workers' breathing zone. If the engineering controls are not sufficient to maintain concentrations of vapours/mists below the exposure standards, suitable respiratory protection must be worn.

Respiratory Protection
If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable vapor/mist filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements. Reference should be made to Australian Standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

Eye Protection
Safety glasses with full face shield should be used. Eye protection devices should conform to relevant regulations. Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337 - Eye Protectors for Industrial Applications.

Hand Protection
Wear gloves of impervious material such as glove material. Final choice of appropriate gloves will vary according to individual circumstances i.e. methods of handling or according to risk assessments undertaken. Occupational protective gloves should conform to relevant regulations. Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance.

Body Protection
Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

9. PHYSICAL AND CHEMICAL PROPERTIES

Properties	Description	Properties	Description
Form	Liquid	**Appearance**	Clear colourless liquid
Odour	Sharp odour	**Decomposition Temperature**	>50°C
Melting Point	- 52°C	**Boiling Point**	114°C
Solubility in Water	Soluble	**pH**	0.2-0.4
Vapour Pressure	0.133kPa at (20°C)	**Vapour Density (Air=1)**	Not available
Evaporation Rate	Not available	**Odour Threshold**	Not available
Viscosity	Not available	**Partition Coefficient: n-octanol/water**	Not available
Density	1.20g/cm³ (20°C)	**Flash Point**	Not applicable
Flammability	Non combustible. This product is an oxidizing liquid and may support the combustion of other materials.	**Auto-Ignition Temperature**	Not available
Flammable Limits - Lower	Not available	**Flammable Limits - Upper**	Not available

10. STABILITY AND REACTIVITY

Reactivity
Reacts with incompatibles.

Chemical Stability
Stable under normal conditions of storage and handling. Stable below 50°C.

Conditions to Avoid
Heat, open flames and other sources of ignition. Direct sunlight or contamination of any kind.

Incompatible materials
Reducing agents, combustible materials, contaminants. Sulphides and acids.

Hazardous Decomposition Products
Will release oxygen when heated, intensifying a fire.

Possibility of hazardous reactions
May ignite organic/combustible materials. May explode if heated. Will decompose slowly at ambient temperatures to evolve oxygen.

Hazardous Polymerization
Will not occur.

11. TOXICOLOGICAL INFORMATION

Toxicology Information
Toxicity data available for this material.

Acute Toxicity - Oral
Hydrogen peroxide
LD50(mouse): 2000 mg/kg

Acute Toxicity - Inhalation
Hydrogen peroxide
LC50(rat): 2000 mg/m³/4h

Ingestion
Harmful if swallowed. Ingestion of this product will cause nausea, vomiting, abdominal pain and chemical burns to the mouth, throat and stomach.

Inhalation
Harmful if inhaled. Inhalation will result in respiratory irritation and possible harmful corrosive effects including lesions of the nasal septum, pulmonary edema, pneumonitis and emphysema.

Skin
Causes burns. Corrosive to the skin. Skin contact can cause redness, itching, irritation, severe pain and chemical burns with resultant tissue destruction.

Eye
Causes eye damage. Eye contact will cause stinging, blurring, tearing, severe pain and possible burns, necrosis, permanent damage and blindness.

Respiratory sensitisation
Not expected to be a respiratory sensitiser.

Skin Sensitisation
Not expected to be a skin sensitiser.

Germ cell mutagenicity
Not considered to be a mutagenic hazard.

Carcinogenicity
Not considered to be a carcinogenic hazard.
Hydrogen peroxide is listed as a Group 3: Not classifiable as to carcinogenicity to humans according to International Agency for Research on Cancer (IARC).

Reproductive Toxicity
Not considered to be toxic to reproduction.

STOT-single exposure
May cause respiratory irritation.

STOT-repeated exposure
Not expected to cause toxicity to a specific target organ.

Aspiration Hazard
Not expected to be an aspiration hazard.

12. ECOLOGICAL INFORMATION

Ecotoxicity
No ecological data available for this material.

Persistence and degradability
Readily biodegradable.

Mobility
Not available

Bioaccumulative Potential
Not available

Other Adverse Effects
Not available

Environmental Protection
Do not discharge this material into waterways, drains and sewers.

13. DISPOSAL CONSIDERATIONS

Disposal considerations
The disposal of the spilled or waste material must be done in accordance with applicable local and national regulations.

14. TRANSPORT INFORMATION

Transport Information
This material is classified as a Division 5.1 Oxidising agent Dangerous Good and subsidiary Class 8 Corrosive Substances
The susbstances that fall into this classification are incompatible in a placard load with any of the following:
- Class 1, Explosives
- Division 2.1, Flammable Gases
- Division 2.3, Toxic Gases
- Class 3, Flammable Liquids
- Division 4.1, Flammable Solids
- Division 4.2, Spontaneously Combustible Substances
- Division 4.3, Dangerous When Wet Substances
- Division 5.1, Oxidising Agents
- Division 5.2, Organic Peroxides
- Class 6, Toxic or Infectious Substances, if the Class 6 dangerous goods are cyanides and the Class 8 dangerous goods are acids; if the Class 6 substance is a fire risk substance
- Class 7, Radioactive Substances
and are incompatible with food and food packaging in any quantity.
Strong acids must not be loaded in the same freight container or on the same vehicle with strong alkalis. Packing Group I and II acids and alkalis should be considered as strong.
- Class 9, Miscellaneous Dangerous Goods, if the Class 9 substance is a fire risk substance
- Fire risk substances
- Combustible liquids

Marine Transport (IMO/IMDG):
Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.
UN No.: 2014
Proper Shipping Name: HYDROGEN PEROXIDE, AQUEOUS SOLUTION
Class: 5.1
Sub: 8
Packing Group: II
EMS No.: F-H, S-Q
Special Provision(s): -

Air Transport (ICAO/IATA):
Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.
UN No.: 2014
with 20% or more but 40% or less hydrogen peroxide
Proper Shipping Name: HYDROGEN PEROXIDE, AQUEOUS SOLUTION
Class: 5.1
Sub: 8
Packing Group: II
Label: Oxidizer, Corrosive
Packaging Instructions (passenger & cargo): 550
Packaging Instructions (cargo only): 554
Special Provision(s): -

UN No.: 2014
with more than 40% but 60% or less hydrogen peroxide
Proper Shipping Name: HYDROGEN PEROXIDE, AQUEOUS SOLUTION
Class: 5.1
Sub: 8
Packing Group: -
Label: -
Packaging Instructions (passenger & cargo): Forbbiden
Packaging Instructions (cargo only): Forbbiden
Special Provision(s): A2 A75

U.N. Number
2014

UN proper shipping name
HYDROGEN PEROXIDE, AQUEOUS SOLUTION

Transport hazard class(es)
5.1

Sub.Risk
8

Packing Group
II

Hazchem Code
2P

EPG Number
5.1.005

IERG Number
31

IMDG Marine pollutant
No

15. REGULATORY INFORMATION

Regulatory information
Classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia
Classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)

Poisons Schedule
S6

Australia (AICS)
All components of this product are listed on the Inventory or exempted.

16. OTHER INFORMATION

Date of preparation or last revision of SDS
SDS amendment: July 2014
3. Composition/information on ingredients
14. Transport information
MSDS Reviewed: June 2014
Supersedes: February 2011

References
Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice
Standard for the Uniform Scheduling of Medicines and Poisons.
Australian Code for the Transport of Dangerous Goods by Road & Rail.
Model Work Health and Safety Regulations, Schedule 10: Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.
American Conference of Industrial Hygienists (ACGIH)
Globally Harmonised System of classification and labelling of chemicals.

Contact Person/Point
Emergency contact:
Australia 1800 638 556 landline +61 438 465 960
New Zealand 0800 154 666 landline +64 962 390 85

END OF SDS