



ECOWASH SYSTEMS
DISHWASHING EQUIPMENT, CHEMICALS & SERVICE

MATERIAL DATA SAFETY SHEET

PRODUCT NAME **ECOWASH HYDROGEN PEROXIDE**

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Supplier Name ECOWASH SYSTEMS
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Synonym(s) HYDROGEN PEROXIDE
Use(s) SANITISING / CLEANING

MSDS Date 25 July 2007

2. HAZARDS IDENTIFICATION

CLASSIFIED AS HAZARDOUS ACCORDING TO NOHSC CRITERIA

RISK PHRASES

R34 Causes burns.

R68/21/22 Harmful: possible risk of irreversible effects in contact with skin and if swallowed.

R8 Contact with combustible material may cause fire.

SAFETY PHRASES

S1/2 Keep locked up and out of reach of children.

S3 Keep in a cool place.

S36/39 Wear suitable protective clothing and eye/face protection.

S45 In case of accident or if you feel unwell, contact a doctor or Poisons Information Centre immediately (show the label where possible).

CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE

UN No.	2014	DG Class	5.1	Subsidiary Risk(s)	None Allocated
Pkg Group	II	Hazchem Code	2P	EPG	5A1

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	Formula	CAS No.	Content
HYDROGEN PEROXIDE	H ₂ O ₂	7722-84-1	49.5-50.5%
ADDITIVES	Not Available	Not Available	Not Available

PRODUCT NAME HYDROGEN PEROXIDE

4. FIRST AID MEASURES

Eye	Hold eyelids apart and flush continuously with water. Continue until advised to stop by the Poisons Information Centre, a doctor, or for at least 15 minutes. Keep patient calm.
Inhalation	Leave area of exposure immediately. If assisting a victim avoid becoming a casualty, wear an Air-line respirator where an inhalation risk exists. Remove victim from exposure area & keep warm. If victim is not breathing apply artificial respiration & seek urgent medical attention.
Skin	Remove contaminated clothing and gently flush affected areas with water. Product may penetrate skin and cause severe deep burns. Seek immediate medical attention. Launder clothing before reuse.
Ingestion	DO NOT induce vomiting. Immediately wash out mouth with water, and then give water to drink. Seek medical attention.
Advice to Doctor	Treat symptomatically

5. FIRE FIGHTING MEASURES

Flammability	Non flammable - oxidising agent. May evolve oxygen, increasing fire intensity. Containers may explode if heated. May ignite combustible materials.
Fire and Explosion	Non flammable - potentially explosive - fire promoting oxidising agent. May ignite in contact with incompatible materials. Containers may explode in fire. Evacuate area and contact emergency services. Wear full protective equipment (see spill above) including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers
Extinguishing	Water spray or fog, for large quantities. Prevent contamination of drains or waterways, absorb runoff with sand or similar.
Hazchem Code	2P

6. ACCIDENTAL RELEASE MEASURES

Spillage	If spilt (bulk) wear PVC/nitrile/rubber gloves, an Air-line respirator (where an inhalation risk exists) and coveralls. Ventilate area and collect where possible. Cover with vermiculite or similar (not organic or combustible materials) and place in sealable containers for disposal. Small amounts may be flushed with excess water to sewer.
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7. STORAGE AND HANDLING

Storage	Store in cool, dry, well ventilated area, removed from organic materials, reducing agents, metals, metal oxides, acids, sulphides, heat/ ignition sources and foodstuffs. Contamination with incompatibles may cause fires/ explosions. Ensure packages are adequately labelled, protected from physical damage and sealed when not in use.
Handling	Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Standards	Ingredient	Reference	TWA		STEL	
			ppm	mg/m3	ppm	mg/m3
	Hydrogen peroxide	NOHSC (AUS)	1	1.4	--	--

Biological Limit Values No biological limit allocated.

Engineering Controls Do not inhale vapours. Use in well ventilated areas. In poorly ventilated areas, mechanical explosion proof extraction ventilation is recommended.

PPE Wear splash-proof goggles, rubber or PVC gloves, coveralls and a faceshield. Where an inhalation risk exists, wear an Air-line respirator.



9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	COLOURLESS LIQUID	Solubility (water)	SOLUBLE
Odour	PUNGENT ODOUR	Specific Gravity	1.2
pH	1 to 4	% Volatiles	NOT AVAILABLE
Vapour Pressure	1 mbar @ 30°C	Flammability	NON FLAMMABLE
Vapour Density	1 (Air = 1)	Flash Point	NOT RELEVANT
Boiling Point	115°C	Upper Explosion Limit	NOT AVAILABLE
Melting Point	-52°C	Lower Explosion Limit	NOT AVAILABLE
Evaporation Rate	NOT AVAILABLE	Autoignition Temperature	NOT AVAILABLE
Decomposition Temperature	> 60°C	Viscosity	1.17 mPas @ 20°C

10. STABILITY AND REACTIVITY

Chemical Stability Potential for exothermic hazard.

Conditions to Avoid Avoid heat, sparks, open flames and other ignition sources.

Material to Avoid Oxidising agent. Incompatible with most metals (eg aluminum oxides) metal oxides, reducing agents (eg hydrazine hydride), sulphides and acids. May ignite organic/combustible material (eg coal and paper). May explode if heated. Also incompatible with alkalis (e.g. hydroxides), metal salts and organic materials.

Decomposition May evolve toxic gases if heated to decomposition.

Hazardous Reactions Polymerization is not expected to occur.

11. TOXICOLOGICAL INFORMATION

Health Hazard Summary Use safe work practices to avoid eye or skin contact and vapour inhalation. Exposure may result in severe and permanent eye, skin and respiratory damage. Upon dilution the potential for corrosive and toxic effects will be reduced.

Eye Exposure may result in pain, conjunctivitis, corneal burns and ulceration with possible permanent damage. Effects may be delayed.

Inhalation Over exposure may result in mucous membrane irritation, coughing, and later a burning sensation of the upper respiratory tract. At high levels; ulceration, breathing difficulties, chemical pneumonitis and pulmonary oedema.

Skin Contact may result in itching, pain, redness, rash and dermatitis. Prolonged contact may result in burns.

Ingestion Ingestion may result in burns to the mouth and throat, nausea, vomiting, ulceration of the gastrointestinal tract, oedema, rapid pulse, shock, unconsciousness, convulsions and death.

Toxicity Data HYDROGEN PEROXIDE (7722-84-1)
LC50 (Inhalation): 2000 mg/m³/4 hours (rat)
LD50 (Ingestion): 2000 mg/kg (mouse)
LD50 (Skin): 1200 mg/kg (mouse)

12. ECOLOGICAL INFORMATION

Environment Gaseous hydrogen peroxide is recognized to be a key component and product of the earth's lower atmospheric photochemical reactions, both in a clean and polluted atmosphere. Hydrogen peroxide released to the atmosphere will degrade quite rapidly. Hydrogen peroxide is not expected to accumulate in the food chain.

Persistence / Degradability This product is readily biodegradable.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Absorb with double volume of 90:10 mixture of sand-soda ash mixture. Mix thoroughly. Using a plastic scoop, slowly add to a large beaker of sodium sulphite solution (3-4 litres), stirring. Neutralise with dilute sulphuric acid. Once settled, decant sulphate solution and discard of residue to an approved landfill site. Small amounts can be diluted with excess water and flushed to sewer.

Legislation Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

PRODUCT NAME HYDROGEN PEROXIDE**CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE**

Shipping Name HYDROGEN PEROXIDE, AQUEOUS SOLUTION with not less than 20 % but not more than 60 % hydrogen peroxide (stabilized as necessary)

UN No.	2014	DG Class	5.1	Subsidiary Risk(s)	None Allocated
Pkg Group	II	Hazchem Code	2P	EPG	5A1

IATA

Shipping Name HYDROGEN PEROXIDE, AQUEOUS SOLUTION with not less than 20 % but not more than 60 % hydrogen peroxide (stabilized as necessary)

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IMDG

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Pkg Group	II				

15. REGULATORY INFORMATION

Poison Schedule A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP).

AICS All chemicals listed on the Australian Inventory of Chemical Substances (AICS).

16. OTHER INFORMATION

Additional Information RESPIRATORS: In general the use of respirators should be limited and engineering controls employed to avoid exposure. If respiratory equipment must be worn ensure correct respirator selection and training is undertaken. Remember that some respirators may be extremely uncomfortable when used for long periods. The use of air powered or air supplied respirators should be considered where prolonged or repeated use is necessary.

EXPOSURE STANDARDS - TIME WEIGHTED AVERAGE (TWA) or WES (WORKPLACE EXPOSURE STANDARD) (NZ): Exposure standards are established on the premise of an 8 hour work period of normal intensity, under normal climatic conditions and where a 16 hour break between shifts exists to enable the body to eliminate absorbed contaminants. In the following circumstances, exposure standards must be reduced: strenuous work conditions; hot, humid climates; high altitude conditions; extended shifts (which increase the exposure period and shorten the period of recuperation).

ABBREVIATIONS:

mg/m³ - Milligrams per cubic metre

ppm - Parts Per Million

TWA/ES - Time Weighted Average or Exposure Standard.

CNS - Central Nervous System

NOS - Not Otherwise Specified

pH - relates to hydrogen ion concentration - this value will relate to a scale of 0 - 14, where 0 is highly acidic and 14 is highly alkaline.

CAS# - Chemical Abstract Service number - used to uniquely identify chemical compounds.

M - moles per litre, a unit of concentration.

IARC - International Agency for Research on Cancer.

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PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:

The recommendation for protective equipment contained within this Chem Alert report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

HEALTH EFFECTS FROM EXPOSURE:

It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a Chem Alert report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

Report Status

This document has been compiled by RMT on behalf of the manufacturer of the product and serves as the manufacturer's Material Safety Data Sheet ('MSDS').

It is based on information concerning the product which has been provided to RMT and ECOWASH SYSTEMS by the manufacturer or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer.

While RMT and Ecowash Systems has taken all due care to include accurate and up-to-date information in this MSDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT and Ecowash Systems accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this MSDS.

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End of Report