

# **SAFETY DATA SHEET**

# 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

### 1.1 Product identifier

Product nameHYDROSIL PROSynonym(s)HYDROSIL 35%

1.2 Uses and uses advised againstUse(s)SANITISER

1.3 Details of the supplier of the product

Supplier name	NATURAL ENVIROMENTAL SOLUTIONS
Address	7/19 Upton Street, Bundall QLD 4217
Telephone	0413 039 229
Email	info@naturalenviro.co
Website	http://www.hydrosil.com.au

**1.4 Emergency telephone number(s)** 

Emergency

0413 039 229

# 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

CLASSIFIED AS HAZARDOUS ACCORDING TO AUSTRALIAN WHS REGULATIONS

GHS classification(s) Acute Toxicity: Oral: Category 4 Oxidizing Liquids: Category 2 Skin Corrosion/Irritation: Category 1B Acute Toxicity: Inhalation: Category 4

DANGER

2.2 Label elements

Signal word

Pictogram(s)



#### Hazard statement(s)

H272	May intensify fire; oxidizer.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H332	Harmful if inhaled.

Prevention statement(s)

P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P220	Keep/Store away from clothing/incompatible materials/combustible materials.
P221	Take any precaution to avoid mixing with combustibles/incompatible materials.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash 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.



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Response statement(s P301 + P330 + P331 P303 + P361 + P353 P304 + P340 P305 + P351 + P338 P310 P321 P363 P370 + P378	<ul> <li>IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.</li> <li>IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.</li> <li>IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.</li> <li>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</li> <li>Immediately call a POISON CENTER or doctor/physician.</li> <li>Specific treatment is advised - see first aid instructions.</li> <li>Wash contaminated clothing before reuse.</li> <li>In case of fire: Use appropriate media for extinction.</li> </ul>
Storage statement(s) P405 Disposal statement(s) P501	Store locked up. Dispose of contents/container in accordance with relevant regulations.
2.3 Other hazards	

No information provided.

### 3. COMPOSITION/ INFORMATION ON INGREDIENTS

#### 3.1 Substances / Mixtures

Ingredient	CAS Number	EC Number	Content
HYDROGEN PEROXIDE	7722-84-1	231-765-0	30 to 60%
WATER	7732-18-5	231-791-2	Remainder
SILVER	7440-22-4	231-131-3	<0.1%

## 4. FIRST AID MEASURES

#### 4.1 Description of first aid measures

Eye	If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.
Inhalation	If inhaled, remove from contaminated area. To protect rescuer, use an Air-line respirator where an inhalation risk exists. Apply artificial respiration if not breathing.
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	For advice, contact a Poison Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). If swallowed, do not induce vomiting.
First aid facilities	Eye wash facilities and safety shower are recommended.

#### 4.2 Most important symptoms and effects, both acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

#### 4.3 Immediate medical attention and special treatment needed

Treat symptomatically.

# 5. FIRE FIGHTING MEASURES

#### 5.1 Extinguishing media

Water spray or fog, for large quantities. Prevent contamination of drains and waterways.

#### 5.2 Special hazards arising from the substance or mixture

Non flammable - oxidising agent. May increase fire intensity. Do not expose to heat and ignition sources. May ignite in contact with incompatible materials.

#### 5.3 Advice for firefighters

Evacuate area and contact emergency services. Containers may explode in fire. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas.



#### 5.4 Hazchem code

- 2P
- 2 Fine Water Spray.
- P Risk of violent reaction or explosion. Wear liquid-tight chemical protective clothing and breathing apparatus. Dilute spill and run-off.

### 6. ACCIDENTAL RELEASE MEASURES

#### 6.1 Personal precautions, protective equipment and emergency procedures

Wear Personal Protective Equipment (PPE) as detailed in section 8 of the SDS. Ventilate area where possible.

#### 6.2 Environmental precautions

Prevent product from entering drains and waterways.

#### 6.3 Methods of cleaning up

Contain spillage, then cover / absorb spill with non-combustible absorbent material (vermiculite, sand, or similar), collect and place in suitable containers for disposal.

#### 6.4 Reference to other sections

See Sections 8 and 13 for exposure controls and disposal.

# 7. HANDLING AND STORAGE

#### 7.1 Precautions for safe 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.

#### 7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well ventilated area, removed from incompatible substances, heat or ignition sources and foodstuffs. Contamination with incompatibles may cause fire or explosion. Ensure packages are adequately labelled, protected from physical damage and sealed when not in use.

#### 7.3 Specific end use(s)

No information provided.

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### 8.1 Control parameters

#### Exposure standards

Ingredient	Reference	TWA		STEL	
ingreatent		ppm	mg/m³	ppm	mg/m³
Hydrogen peroxide	SWA (AUS)	1	1.4		
Silver, metal	SWA (AUS)		0.1		

**Biological limits** No Biological Limit Value allocated.

#### 8.2 Exposure controls

**Engineering controls** Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical explosion proof extraction ventilation is recommended. Maintain vapour levels below the recommended exposure standard.

#### PPE

Eye / Face	Wear a faceshield and splash-proof goggles.
Hands	Wear PVC or rubber gloves.
Body	Wear coveralls.
Respiratory	Where an inhalation risk exists, wear an Air-line respirator.





# 9. PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1 Information on basic physical and chemical properties

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Appearance	CLEAR COLOURLESS LIQUID	
Odour	SHARP ODOUR	
Flammability	NON FLAMMABLE	
Flash point	NOT RELEVANT	
Boiling point	114°C	
Melting point	-52°C	
Evaporation rate	NOT AVAILABLE	
рН	NOT AVAILABLE	
Vapour density	NOT AVAILABLE	
Specific gravity	NOT AVAILABLE	
Solubility (water)	SOLUBLE	
Vapour pressure	1 mm Hg @ 20°C	
Upper explosion limit	NOT RELEVANT	
Lower explosion limit	NOT RELEVANT	
Partition coefficient	NOT AVAILABLE	
Autoignition temperature	NOT AVAILABLE	
Decomposition temperature	> 50°C	
Viscosity	NOT AVAILABLE	
Explosive properties	NOT AVAILABLE	
Oxidising properties OXIDISING LIQUID		
Odour threshold	NOT AVAILABLE	
9.2 Other information		
% Volatiles	NOT AVAILABLE	
Density	1.20 g/cm³ @ 20°C	

## **10. STABILITY AND REACTIVITY**

#### 10.1 Reactivity

Carefully review all information provided in sections 10.2 to 10.6.

#### 10.2 Chemical stability

Potential for exothermic hazard.

#### 10.3 Possibility of hazardous reactions

Polymerization is not expected to occur.

#### 10.4 Conditions to avoid

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

#### 10.5 Incompatible materials

Oxidising agent. Incompatible with combustible materials, reducing agents (e.g. sulphites), acids (e.g. nitric acid), alkalis (e.g. sodium hydroxide), metals, heat and ignition sources. May explode if heated. Will decompose slowly at ambient temperatures to evolve oxygen. Stable below 50°C.

#### 10.6 Hazardous decomposition products

May evolve toxic gases if heated to decomposition.

# **11. TOXICOLOGICAL INFORMATION**

### 11.1 Information on toxicological effects

Health hazard summary	Corrosive. This product has the potential to cause adverse health effects. Use safe work practices to avoid eye or skin contact and inhalation. Over exposure may result in severe and permanent eye, skin and respiratory damage. Upon dilution, the potential for corrosive effects may be reduced.
Еуе	Corrosive. Contact may result in irritation, lacrimation, pain, redness, corneal burns and possible permanent damage.
Inhalation	Corrosive - toxic. Over exposure may result in mucous membrane irritation of the respiratory tract, coughing and possible burns. High level exposure may result in ulceration of the respiratory tract, breathing difficulties, chemical pneumonitis and pulmonary oedema.
Skin	Corrosive - irritant. Contact may result in irritation, redness, pain, rash, dermatitis and possible burns. Prolonged or repeated exposure may also result in localised bluish discolouration of the skin (argyria).



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Ingestion

Corrosive. Ingestion may result in burns to the mouth and throat, nausea, vomiting, ulceration of the gastrointestinal tract, breathing difficulties, circulatory collapse and coma.

**Toxicity data** 

HYDROGEN PEROXIDE (7722-84-1) LD50 (oral) 200 LD50 (dermal) 120

LC50 (inhalation)

2000 mg/kg (mouse) 1200 mg/kg (mouse) 2000 mg/m³/4 hours (rat)

### **12. ECOLOGICAL INFORMATION**

#### 12.1 Toxicity

No information provided.

#### 12.2 Persistence and degradability

This product is readily biodegradable.

#### 12.3 Bioaccumulative potential

No information provided.

#### 12.4 Mobility in soil

No information provided.

#### 12.5 Other adverse effects

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.

## **13. DISPOSAL CONSIDERATIONS**

#### 13.1 Waste treatment methods

 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**

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



	LAND TRANSPORT (ADG)	SEA TRANSPORT (IMDG / IMO)	AIR TRANSPORT (IATA / ICAO)
14.1 UN Number	2014	2014	2014
14.2 Proper Shipping Name	HYDROGEN PEROXIDE, AQUEOUS SOLUTION with not less than 20% but not more than 60% hydrogen peroxide (stabilized as necessary)	HYDROGEN PEROXIDE, AQUEOUS SOLUTION with not less than 20% but not more than 60% hydrogen peroxide (stabilized as necessary)	HYDROGEN PEROXIDE, AQUEOUS SOLUTION with not less than 20% but not more than 60% hydrogen peroxide (stabilized as necessary)
14.3 Transport hazard classes	5.1, 8	5.1, 8	5.1, 8
14.4 Packing Group	II	II	II

#### 14.5 Environmental hazards No information provided

14.6 Special precautions for user

Hazchem code	2P
GTEPG	5E1



EMS F-H, S-Q

# **15. REGULATORY INFORMATION**

Poison schedule	and environmental regulations/legislation specific for the substance or mixture Classified as a Schedule 6 (S6) Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).		
Classifications	Safework Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals.		
	The classifications and phrases listed below are based on the Approved Criteria for Classifying Hazardous Substances [NOHSC: 1008(2004)].		
Hazard codes	C O Xn	Corrosive Oxidising Harmful	
Risk phrases	R8 R20/22 R34	Contact with combustible material may cause fire. Harmful by inhalation and if swallowed. Causes burns.	
Safety phrases	S1/2 S17 S26 S28 S36/37/39 S45	Keep locked up and out of reach of children. Keep away from combustible material. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice After contact with skin, wash immediately with plenty of water. Wear suitable protective clothing, gloves and eye/face protection. In case of accident or if you feel unwell seek medical advice immediately (show the label where possible).	
Inventory listing(s)	AUSTRALIA: AICS (Australian Inventory of Chemical Substances) All components are listed on AICS, or are exempt.		

## 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).

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:

The recommendation for protective equipment contained within this 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 ChemAlert report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.



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Abbreviations	ACGIH	American Conference of Governmental Industrial Hygienists
	CAS #	Chemical Abstract Service number - used to uniquely identify chemical compounds
	CNS	Central Nervous System
	EC No.	EC No - European Community Number
	EMS	Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous
		Goods)
	GHS	Globally Harmonized System
	GTEPG	Group Text Emergency Procedure Guide
	IARC	International Agency for Research on Cancer
	LC50	Lethal Concentration, 50% / Median Lethal Concentration
	LD50	Lethal Dose, 50% / Median Lethal Dose
	mg/m³	Milligrams per Cubic Metre
	OEL	Occupational Exposure Limit
	рН	relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).
	ppm	Parts Per Million
	STEL	Short-Term Exposure Limit
	STOT-RE	Specific target organ toxicity (repeated exposure)
	STOT-SE	Specific target organ toxicity (single exposure)
	SUSMP	Standard for the Uniform Scheduling of Medicines and Poisons
	SWA	Safe Work Australia
	TLV	Threshold Limit Value
	TWA	Time Weighted Average

#### **Report status**

This document has been compiled by NES on behalf of the manufacturer, importer or supplier of the product and serves as their Safety Data Sheet ('SOS').

It is based on information concerning the product which has been provided to NES by the manufacturer, importer or supplier 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, importer or supplier.

While NES has taken all due care to include accurate and up-to-date information in this SOS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, NES accepts

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[ End of SDS ]



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