

### 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

#### 1.1 Product identifier

**Product name** HYDROSIL PRO  
**Synonym(s)** HYDROSIL 50%

#### 1.2 Uses and uses advised against

**Use(s)** SANITISER

#### 1.3 Details of the supplier of the product

**Supplier name** NATURAL ENVIROMENTAL SOLUTIONS  
**Address** 20 CENTRAL PARK Ave ASHMORE, AUSTRALIA  
**Telephone** 0413 039 229  
**Email** [info@naturalenviro.co](mailto: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

#### 2.2 Label elements

**Signal word** DANGER

**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    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.  
P321    Specific treatment is advised - see first aid instructions.  
P363    Wash contaminated clothing before reuse.  
P370 + P378    In case of fire: Use appropriate media for extinction.

### Storage statement(s)

P405    Store locked up.

### Disposal statement(s)

P501    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	
		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
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

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
pH	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

<b>Health hazard summary</b>	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.
<b>Eye</b>	Corrosive. Contact may result in irritation, lacrimation, pain, redness, corneal burns and possible permanent damage.
<b>Inhalation</b>	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.
<b>Skin</b>	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).

**PRODUCT NAME    HYDROSIL PRO**

<b>Ingestion</b>	Corrosive. Ingestion may result in burns to the mouth and throat, nausea, vomiting, ulceration of the gastrointestinal tract, breathing difficulties, circulatory collapse and coma.		
<b>Toxicity data</b>	HYDROGEN PEROXIDE (7722-84-1)		
	LD50 (oral)	2000 mg/kg (mouse)	
	LD50 (dermal)	1200 mg/kg (mouse)	
	LC50 (inhalation)	2000 mg/m <sup>3</sup> /4 hours (rat)	

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**12. ECOLOGICAL INFORMATION**

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**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.

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**13. DISPOSAL CONSIDERATIONS**

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**13.1 Waste treatment methods**

<b>Waste disposal</b>	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.
<b>Legislation</b>	Dispose of in accordance with relevant local legislation.

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**14. TRANSPORT INFORMATION**

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



	LAND TRANSPORT (ADG)	SEA TRANSPORT (IMDG / IMO)	AIR TRANSPORT (IATA / ICAO)
<b>14.1 UN Number</b>	2014	2014	2014
<b>14.2 Proper Shipping Name</b>	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)
<b>14.3 Transport hazard classes</b>	5.1, 8	5.1, 8	5.1, 8
<b>14.4 Packing Group</b>	II	II	II

**14.5 Environmental hazards**    No information provided

**14.6 Special precautions for user**

Hazchem code	2P
GTEPG	5E1

## 15. REGULATORY INFORMATION

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

<b>Poison schedule</b>	Classified as a Schedule 6 (S6) Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).	
<b>Classifications</b>	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)].	
<b>Hazard codes</b>	C	Corrosive
	O	Oxidising
	Xn	Harmful
<b>Risk phrases</b>	R8	Contact with combustible material may cause fire.
	R20/22	Harmful by inhalation and if swallowed.
	R34	Causes burns.
<b>Safety phrases</b>	S1/2	Keep locked up and out of reach of children.
	S17	Keep away from combustible material.
	S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
	S28	After contact with skin, wash immediately with plenty of water.
	S36/37/39	Wear suitable protective clothing, gloves and eye/face protection.
	S45	In case of accident or if you feel unwell seek medical advice immediately (show the label where possible).
<b>Inventory listing(s)</b>	<b>AUSTRALIA: AICS (Australian Inventory of Chemical Substances)</b> All components are listed on AICS, or are exempt.	

## 16. OTHER INFORMATION

<b>Additional information</b>	<p><b>RESPIRATORS:</b> 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.</p> <p><b>EXPOSURE STANDARDS - TIME WEIGHTED AVERAGE (TWA) or WES (WORKPLACE EXPOSURE STANDARD) (NZ):</b> 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).</p> <p><b>PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:</b> 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.</p> <p><b>HEALTH EFFECTS FROM EXPOSURE:</b> 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.</p>
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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/m <sup>3</sup>	Milligrams per Cubic Metre
OEL	Occupational Exposure Limit
pH	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 ('SDS').

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 SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, NES 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 SDS.

**Prepared by**

David Rogers  
Natural Environmental Solutions PTY LTD  
20 Central Park Ave, Ashmore, QLD AUSTRALIA 4214  
Phone: +6 4 7 8 627 734  
Email: david@naturalenviro.co  
Web: www.hydrosil.com.au

**[ End of SDS ]**



**THE  
NATURAL  
ENVIRO<sub>co.</sub>**

Natural Environmental Solutions PTY LTD  
trading as

**The Natural Enviro Co.**

ACN: 006 830 726 ABN: 55 006 830 726  
20 Central Park Avenue, Ashmore QLD 4214  
**www.naturalenviro.co**