



SAFETY DATA SHEET

Product Name: DESCALER

Date of Issue: DEC 2016

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SECTION 1 – STATEMENT OF CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Trade Name:	DESCALER		
SUPPLIER:	ECOCLEAN UTILITY AGENCIES PTY LTD		
ADDRESS:	PO Box 6224 YATALA DC 4207		
TELEPHONE:	(07) 5549 3622	FAX:	(07) 5549 3666
EMERGENCY PHONE:	13 1126 in Australia.	ABN:	72 135 037 160
Substance:	Water based liquid	Product Use:	Descaler
Creation Date:	Dec 2016	Revision Date:	Dec 2021

SECTION 2 – HAZARDS IDENTIFICATION

Classification of the substance or mixture

Poisons Schedule	S5 (PHOSPHORIC ACID)
Dangerous Goods	Not classified as Dangerous Goods
GHS Classification	Serious Eye Damage/Irritation Category 1 Skin Irritation Category 2

Label elements

GHS label pictograms	
Signal word	DANGER

Hazard statement(s)

H318	Causes serious eye damage.
H315	Causes skin irritation.

Precautionary statement(s): General

P102	Keep out of reach of children.
P103	Read label before use.

Precautionary statement(s): Prevention

P280	Wear eye protection/face protection and protective gloves.
P264	Wash hands thoroughly after handling.

Precautionary statement(s): Response

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.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P362	Take off contaminated clothing and wash before reuse.
P321	Specific treatment (see First Aid Measures on Safety Data Sheet).

Precautionary statement(s): Storage

	None allocated
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Precautionary statement(s): Disposal

	None allocated
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Note



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IMPORTANT

This SDS and the Hazard Classifications contained therein, only apply to the product in its concentrated form, as supplied. When diluted to 1:10 or greater they no longer apply. However, good hygiene and housekeeping practices should be adhered to.

SECTION 3 – COMPOSITION AND INFORMATION ON INGREDIENTS

Ingredients:	CAS Number:	Proportion:
Orthophosphoric acid	7664-38-2	10 - 30% w/w
Ingredients determined to be non-hazardous	various	< 10 % w/w
Water	7732-18-5	To 100 % w/w

NOTE: Ingredients determined not to be hazardous are present in concentrations that do not exceed the relevant cut-off concentrations as found from NOHSC publication "List of Designated Hazardous Substances" or have been found NOT to meet the criteria of a hazardous substance as defined in the NOHSC publication "Approved Criteria for Classifying Hazardous Substances", or have been found NOT to meet the criteria of a dangerous substance as defined in the GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS (GHS), 4th edition United Nations 2011. Listed ingredients may be below the cut-off concentrations for classification as hazardous, but are listed for information purposes and for additive effects.

SECTION 4 – FIRST AID MEASURES

Inhalation	Remove victim to fresh air away from exposure. Obtain medical attention if symptoms occur.
Skin contact	Immediately wash contaminated skin with plenty of soap and water. Remove contaminated clothing and wash before re-use. Seek medical advice (e.g. doctor) if irritation, burning or redness persists.
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. Immediately call a POISON CENTER or doctor/physician.
Ingestion	Do NOT induce vomiting. Do NOT attempt to give anything by mouth to an unconscious person. Rinse mouth thoroughly with water immediately. Give water to drink. If vomiting occurs, give further water to achieve effective dilution. Seek medical advice (e.g. doctor).
Advice to Doctor	Treat symptomatically.
Scheduled Poisons	Poisons Information Centre in each Australian State capital city or in Christchurch, New Zealand can provide additional assistance for scheduled poisons. (Phone Australia 131126 or New Zealand 0800 764 766).
First Aid Facilities	Eye wash station. Normal washroom facilities.

SECTION 5 – FIRE FIGHTING MEASURES

Fire and Explosion Hazards	Non flammable liquid. However, on evaporation of the aqueous component, the residual material may burn.
Extinguishing Media	Use an extinguishing media suitable for surrounding fires. Use carbon dioxide (CO ₂) fire extinguisher, water fog or alcohol resistant foam or fine water spray.☑
Fire Fighting	Keep containers exposed to extreme heat cool with water spray. Fire fighters to wear self-contained breathing apparatus if risk of exposure to products of combustion or decomposition.
Flash Point	None

SECTION 6 – ACCIDENTAL RELEASE MEASURES



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Emergency Procedures	<p>Minor spills do not normally need any special clean-up measures – rinse with water.</p> <p>In the event of a major spill, prevent spillage from entering drains or water courses. Wear appropriate personal protective equipment and clothing to prevent exposure. Increase ventilation. As a water based product, if spilt on electrical equipment the product will cause short-circuits. If possible contain the spill. Place inert absorbent material onto spillage. Collect the material and place into a suitable labelled container. Dispose of waste according to the 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.</p>
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SECTION 7 – HANDLING AND STORAGE

Handling	<p>Avoid skin or eye contact with concentrate. Wear protective clothing when risk of exposure occurs. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers closed at all times. Avoid physical damage to containers. Always wash hands with soap and water after handling. Work clothes should be laundered. Launder contaminated clothing before re-use.</p>
Storage	<p>Store in a cool, dry, well-ventilated area, out of direct sunlight. Protect from freezing. Store in suitable, labelled containers. Keep containers tightly closed. Store away from incompatible materials. Ensure that storage conditions comply with applicable local and national regulations.</p>

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Limits	<p>National Occupational Exposure Limits, as published by National Occupational Health & Safety Commission:</p> <p>Time-weighted Average (TWA): None established for product. Phosphoric acid: 1 mg/m³</p> <p>Short Term Exposure Limit (STEL): None established for product. Phosphoric acid: 3 mg/m³</p>
Ventilation	Use with adequate ventilation.
Personal Protective Equipment	Use good occupational work practice. The use of protective clothing and equipment depends upon the degree and nature of exposure. The following protective equipment should be available;
Eye Protection 	<p>Safety glasses with full face shield should be used for handling concentrate in quantity, cleaning up spills, decanting, etc. 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.</p>
Hand Protection 	<p>Wear gloves of impervious material such as butyl rubber, natural latex, neoprene, PVC and nitrile – to handle in quantity, clean up spills, decanting, etc. 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.</p>
Body Protection 	<p>Suitable protective workwear, e.g. rubber or plastic apron, sleeves, boots and cotton overalls buttoned at neck and wrist are recommended. Chemical resistant apron is recommended where large quantities are handled.</p>



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Respirator	<p>Generally not required for typical applications with diluted solutions as per label directions. Not required for normal cleaning operations with adequate ventilation.</p> <p>Where high contaminant spray mist or vapour levels exist, ie, approaching the exposure limit, the following additional equipment is required: For short elevated exposures, eg, spillages:- Appropriate organic vapour cartridge respirator as per the requirements of AS/NZS 1715 and AS/NZS 1716 (Respiratory protective devices). For prolonged exposure and confined spaces:- full face air supplied or self contained breathing apparatus (if vapour levels exceed the Exposure Limit by more than ten times, air supplied apparatus should be used).</p>
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SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Non-viscous liquid	Colour	Yellow
Odour	Characteristic odour	Specific Gravity	1.08 – 1.12 @ 25 °C
Boiling Point	Approximately 100 °C	Freezing Point	Approximately 0 °C
Vapour Pressure	Not available	Vapour Density	Not available
Flash Point	Not flammable	Flammable Limits	none
Water Solubility	Miscible in all proportions	pH	<1.5 neat
Volatile Organic Compounds (VOC)	0 % v/v	Per Cent Volatile	Ca 85 % v/v
Viscosity	Not available	Odour Threshold	Not available

SECTION 10 – STABILITY AND REACTIVITY

Reactivity	Stable at normal temperatures and pressure.
Conditions to Avoid	Extremes of temperature and direct sunlight.
Incompatibilities	Reducing agents, oxidizing agents, alkalis.
Hazardous Decomposition	Thermal decomposition may result in the release of toxic and/or irritating fumes.

SECTION 11 – TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Inhalation	Not considered to be an inhalation hazard. No vapour or mist generally associated with liquid form of the product – water based. Aerosols of this product containing acid are irritant to the respiratory system.
Skin contact	Properly diluted solutions not expected to be irritating to skin. Prolonged contact with concentrate may be irritating to skin. The symptoms may include redness, itching and swelling.
Eye contact	Concentrated product causes eye irritation. Eye contact with concentrate will cause stinging, blurring, tearing. Contact with concentrated product may cause serious eye damage.
Ingestion	Ingestion of this product may irritate the gastric tract causing nausea and vomiting.
Chronic exposure	No known effects.
Toxicology Information	Not toxic, based on ingredients. Oral LD50 (calculated) : >8000 mg/kg
Carcinogen Status	
NOHSC	No significant ingredient is classified as carcinogenic by NOHSC.
NTP	No significant ingredient is classified as carcinogenic by NTP.
IARC	No significant ingredient is classified as carcinogenic by IARC.
Respiratory sensitisation	Not expected to be a respiratory sensitizer.
Skin Sensitisation	Not expected to be a skin sensitizer.
Germ cell mutagenicity	Not considered to be a mutagenic hazard.
Reproductive Toxicity	Not considered to be toxic to reproduction.



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STOT-single exposure	Not expected to cause toxicity to a specific target organ.
STOT-repeated exposure	Not expected to cause toxicity to a specific target organ.
Aspiration Hazard	Not expected to be an aspiration hazard.

SECTION 12 – ECOLOGICAL INFORMATION

Eco-toxicity Product (as sold)	Not harmful to aquatic life. LC50 > 100mg/L. Acute Aquatic Toxicity (Calculated) LC50: 750 mg/L. Acute Aquatic Toxicity NOT HAZARDOUS
Eco-toxicity Product (at use dilution 1:100 rinse)	Not harmful to aquatic life. LC50 > 100mg/L. Acute Aquatic Toxicity (Calculated) LC50: 75,000 mg/L. Acute Aquatic Toxicity NOT HAZARDOUS
Persistence and degradability	Biodegradable, based on ingredients.
Bio accumulative potential	No bioaccumulation is expected.
Mobility in soil	Due to its physico-chemical characteristics, highly mobile in the environment and will partition to the aquatic compartment.
Other adverse effects	Not available
Environmental Protection	Do not discharge this material into waterways.

SECTION 13 – DISPOSAL CONSIDERATIONS

	Dispose of waste according to applicable local and national regulations. Do not allow into drains or watercourses or dispose of where ground or surface waters may be affected. Wastes including emptied containers are controlled wastes and should be disposed of in accordance with all applicable local and national regulations.
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SECTION 14 – TRANSPORT INFORMATION

Labels Required	
ADG	Not classified as Dangerous Goods.
IMDG Marine Pollutant	No
HAZCHEM	None allocated.
Land Transport (ADG)	
UN Number	None allocated.
ADG Code	None allocated.
HAZCHEM Code	None allocated.
Special Provisions	None allocated.
Packing Group	None allocated.
Packaging Method	None allocated.
Segregation	None allocated.

SECTION 15 – REGULATORY INFORMATION

GHS Classification	Classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.
SUSMP	S5 (PHOSPHORIC ACID)
ADG Code	Not DG
AICS	All ingredients present on AICS.

SECTION 16 – OTHER INFORMATION



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Issue Date	13 th December 2016
Version Number	V 2.0 GHS CLASSIFICATION.
Abbreviations and acronyms	<p>ADG Code: Australian Code for the Transport of Dangerous Goods by Road and Rail.</p> <p>AICS: Australian Inventory of Chemical Substances.</p> <p>CAS Number: Chemical Abstracts Service Registry Number.</p> <p>GHS: Globally Harmonized System of Classification and Labelling of Chemicals</p> <p>HAZCHEM: An emergency action code of numbers and letters which gives information to emergency services.</p> <p>HSIS: Hazardous Substances Information System</p> <p>IARC: International Agency for Research on Cancer.</p> <p>NOHSC: National Occupational Health and Safety Commission.</p> <p>NTP: National Toxicology Program (USA).</p> <p>SDS: Safety Data Sheet</p> <p>STEL: Short Term Exposure Limit.</p> <p>SUSMP: Standard for the Uniform Scheduling of Medicines and Poisons.</p> <p>TWA: Time Weighted Average.</p> <p>UN Number: United Nations Number.</p>
Literature references	<p>Preparation of Safety Data Sheets for Hazardous Chemicals – Code of Practice (Safe Work Australia)</p> <p>GHS Hazardous Chemical Information List (Safe Work Australia)</p> <p>Guidance on the Classification of Hazardous Chemicals under the WHS Regulations.</p> <p>Global Harmonized System of Classification and Labelling of Chemicals (GHS)</p> <p>“Australian Exposure Standards”. Safework Australia</p> <p>Australian Code For The Transport Of Dangerous Goods By Road And Rail</p> <p>Standard for the Uniform Scheduling of Medicines and Poisons</p> <p>Material Safety Data Sheets – individual raw materials – Suppliers</p> <p>HSIS – Hazardous Substance Information System – National Safe Work Australia Data Base.</p> <p>HCIS – Hazardous Chemical Information System – National Safe Work Australia Data Base.</p>
Disclaimer	<p>This MSDS summarizes at the date of issue our best knowledge of the health and safety hazard information of this product, and in particular how to safely handle and use this product in the workplace. Since the supplier cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this MSDS in the context of how the user intends to handle and use the product in the workplace. If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this supplier.</p>

End of SDS