

Safety Data Sheet



Hazardous, Dangerous Goods

1. MATERIAL AND SUPPLY COMPANY IDENTIFICATION

Product name: **Descaler**

Recommended use: Descaler

Supplier: Ecoclean Utility Agencies (Chemical Man Pty Ltd)
ABN: 38 630 192 022
Street Address: 26 Notar Drive
Ormeau
QLD 4207
Telephone: 07 5549 3666

Emergency Telephone number: **Poisons Information Centre: Phone 13 11 26**

2. HAZARDS IDENTIFICATION

This material is hazardous according to the criteria of Safe Work Australia GHS 7.



Signal Word

Danger

Hazard Classifications

Corrosive to Metals - Category 1

Skin Irritation - Category 2

Eye Damage - Category 1

Hazard Statements

H290 May be corrosive to metals.
H315 Causes skin irritation.
H318 Causes serious eye damage.

Prevention Precautionary Statements

P101 Keep out of reach of children.
P103 Read carefully and follow all instructions.
P234 Keep only in original packaging.
P264 Wash hands thoroughly after handling.
P280 Wear protective gloves and protective clothing including eye and face protection.

Response Precautionary Statements

P101 If medical advice is needed, have product container or label at hand.
P302+P352 IF ON SKIN: Wash with plenty of water and soap.
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 CENTRE or doctor.
P321 Specific treatment (see first aid section on product label).
P332+P313 If skin irritation occurs: Get medical advice.
P362+P364 Take off contaminated clothing and wash it before reuse.
P390 Absorb spillage to prevent material damage.

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Storage Precautionary Statement

P406 Store in corrosive resistant container with a resistant inner liner.

Disposal Precautionary Statement

Not allocated

Poison Schedule: S5 Caution

DANGEROUS GOOD CLASSIFICATION

Classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

Dangerous Goods Class: 8

3. COMPOSITION INFORMATION

CHEMICAL ENTITY	CAS NO	PROPORTION
Phosphoric acid	7664-38-2	10 - 30 %
Ingredients determined to be non-hazardous		Balance
		100%

4. FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone Australia 131 126, New Zealand 0800 764 766).

Inhalation: Remove person from exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist.

Skin Contact: If skin or hair contact occurs, immediately remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by the Poisons Information Centre or a doctor; or for 15 minutes and transport to doctor or hospital.

Eye contact: Immediately irrigate with copious quantities of water for 15 minutes. Eyelids to be held open. Remove clothing if contaminated and wash skin. Urgently seek medical assistance. Transport to hospital or medical centre.

Ingestion: Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water to drink. Never give anything by the mouth to an unconscious person. If vomiting occurs give further water. Seek medical advice.

PPE for First Aiders: Wear safety shoes, overalls, gloves and safety glasses. Available information suggests that gloves made from butyl rubber or polyvinyl chloride (PVC) should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

Notes to physician: Treat symptomatically. Can cause corneal burns.

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5. FIRE FIGHTING MEASURES

Hazchem Code: 2R

Suitable extinguishing media: If material is involved in a fire use carbon dioxide (CO²) fire extinguisher, water fog, alcohol resistant foam or fine water spray.

Specific hazards: Non-combustible material, however following evaporation of aqueous component residual material can burn if ignited.

Fire fighting further advice: 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.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILLS

Minor spills can be rinsed with water and do not normally need any special clean-up measures, however it is a safety precaution to wear protective equipment to prevent skin and eye contamination. Avoid inhalation of vapours or dust (from dried product). Wipe up with absorbent (clean rag or paper towels). Collect and seal in properly labelled containers or drums for disposal.

LARGE SPILLS

Clear area of all unprotected personnel. Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contamination and the inhalation of vapours. Work up wind or increase ventilation. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers or drums for disposal. Dispose of waste according to the applicable local and national regulations. If contamination of crops, sewers or waterways has occurred advise local emergency services.

Dangerous Goods - Initial Emergency Response Guide No: 154

7. HANDLING AND STORAGE

Handling: Avoid eye contact and skin contact. Avoid inhalation of vapour, mist or aerosols. 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 prior to reuse.

Storage: Store in a cool, dry, well-ventilated place and out of direct sunlight. Protect from freezing. Store away from foodstuffs. Store away from incompatible materials described in Section 10. Store away from sources of heat and/or ignition. Store in corrosive resistant container with a resistant inner liner. Keep container standing upright. Keep containers closed when not in use - check regularly for leaks. Ensure that storage conditions comply with applicable local and national regulations.

This material is classified as a Class 8 Corrosive as per the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and/or the "New Zealand NZS5433: Transport of Dangerous Goods on Land" and must be stored in accordance with the relevant regulations.

This material is a Scheduled Poison Schedule 5 (Caution) and must be stored, maintained and used in accordance with the relevant regulations.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National occupational exposure limits:

	TWA		STEL		NOTICES
	ppm	mg/m ³	ppm	mg/m ³	
Phosphoric acid	-	1	-	3	-

As published by Safe Work Australia.

TWA - The time-weighted average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life.

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.

These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

If the directions for use on the product label are followed, exposure of individuals using the product should not exceed the above standard. The standard was created for workers who are routinely, potentially exposed during product manufacture.

Biological Limit Values: As per the "National Model Regulations for the Control of Workplace Hazardous Substances (Safe Work Australia)" the ingredients in this material do not have a biological limit allocated.

Engineering Measures: Ensure ventilation is adequate to maintain air concentrations below Exposure Standards. Use only in well ventilated areas. Use with local exhaust ventilation or while wearing appropriate respirator.

Personal Protection Equipment: OVERALLS, GLOVES, SAFETY SHOES, SAFETY GLASSES



Personal protective equipment (PPE) must be suitable for the nature of the work and any hazard associated with the work as identified by the risk assessment conducted.

Wear overalls, gloves, safety shoes and safety glasses. Available information suggests that gloves made from butyl rubber or polyvinyl chloride (PVC) should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

A face shield may be included for supplementary protection of the face, however never for primary protection of the eyes. A chemical resistant apron is recommended where large quantities are handled. If engineering controls are ineffective in controlling airborne concentrations, an approved respirator should be used.

Hygiene measures: Keep away from food, drink and animal feeding stuffs. When using do not eat, drink or smoke. Wash hands prior to eating, drinking or smoking. Avoid contact with clothing. Avoid eye contact and skin contact. Avoid inhalation of vapour, mist or aerosols. Ensure that eyewash stations and safety showers are close to the workstation location.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Form: Liquid
Colour: Yellow
Odour: Characteristic

Solubility: Miscible in all proportions
Specific Gravity: 1.08 - 1.12 @ 25°C
Relative Vapour Density (air=1): N Av
Vapour Pressure: N Av
Flash Point (°C): N App
Melting Point/Range (°C): approx. 0°C
Boiling Point/Range (°C): approx. 100°C
pH: <1.5 neat
Viscosity: N Av
Total VOC (g/Litre): 0% v/v
Odour Threshold: N Av
% Volatile by Volume: ca. 85% v/v

(Typical values only - consult specification sheet)
N Av = Not available, N App = Not applicable

10. STABILITY AND REACTIVITY

Chemical stability: This material is stable when stored and used as directed.

Conditions to avoid: Extremes of temperature and direct sunlight

Incompatible materials: Reducing agents, oxidising agents and alkalis

Hazardous decomposition products: Thermal decomposition may result in the release of toxic and/or irritating fumes.

Hazardous reactions: No known hazardous reactions

11. TOXICOLOGICAL INFORMATION

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:

Acute Effects

Inhalation: Material may be an irritant to mucous membranes and respiratory tract.

Skin contact: Contact with skin will result in irritation.

Ingestion: Swallowing can result in nausea, vomiting and irritation of the gastrointestinal tract.

Eye contact: Contact with eyes will result in serious eye damage. Corrosive to eyes: contact can cause corneal burns. Contamination of eyes can result in permanent injury.

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Acute toxicity

Inhalation: This material has been classified as not hazardous for acute inhalation exposure. Acute toxicity estimate (based on ingredients): $LC_{50} > 20.0$ mg/L for vapours or $LC_{50} > 5.0$ mg/L for dust and mist.

Skin contact: This material has been classified as not hazardous for acute dermal exposure. Acute toxicity estimate (based on ingredients): $LD_{50} > 2,000$ mg/Kg bw

Ingestion: This material has been classified as not hazardous for acute ingestion exposure. Acute toxicity estimate (based on ingredients): $LD_{50} > 8,000$ mg/Kg bw

Corrosion/Irritancy: Eye: this material has been classified as a Category 1 Hazard (irreversible effects to eyes). Causes serious eye damage. Skin: this material has been classified as a Category 2 Hazard (reversible effects to skin). Causes skin irritation.

Sensitisation: Inhalation: this material has been classified as not a respiratory sensitiser. Skin: this material has been classified as not a skin sensitiser.

Aspiration hazard: This material has been classified as not an aspiration hazard.

Specific target organ toxicity (single exposure): This material has been classified as not a specific hazard to target organs by a single exposure.

Chronic Toxicity

Mutagenicity: This material has been classified as not a mutagen.

Carcinogenicity: This material has been classified as not a carcinogen.

Reproductive toxicity (including via lactation): This material has been classified as not a reproductive toxicant.

Specific target organ toxicity (repeat exposure): This material has been classified as not a specific hazard to target organs by repeat exposure.

12. ECOLOGICAL INFORMATION

Avoid contaminating waterways.

Acute aquatic hazard: This material has been classified as not hazardous for acute aquatic exposure. Acute toxicity estimate (based on ingredients): $LC_{50} > 100$ mg/L

Long-term aquatic hazard: This material has been classified as not hazardous for chronic aquatic exposure. Non-rapidly or rapidly degradable substance for which there are adequate chronic toxicity data available OR in the absence of chronic toxicity data, Acute toxicity estimate (based on ingredients): >100 mg/L, where the substance is not rapidly degradable and/or $BCF < 500$ and/or $\log K_{ow} < 4$.

Ecotoxicity: Not harmful to aquatic life

Persistence and degradability: Biodegradable, based on ingredients

Bioaccumulative potential: No bioaccumulation is expected

Mobility: Due to its physico-chemical characteristics, highly mobile in the environment and will partition to the aquatic compartment.

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13. DISPOSAL CONSIDERATIONS

Persons conducting disposal, recycling or reclamation activities should ensure that appropriate personal protection equipment is used, see "Section 8. Exposure Controls and Personal Protection" of this SDS.

If possible, material and its container should be recycled. If material or container cannot be recycled, dispose in accordance with local, regional, national and international Regulations.

14. TRANSPORT INFORMATION

ROAD AND RAIL TRANSPORT

Classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".



UN No:	1805
Dangerous Goods Class:	8
Packing Group:	III
Hazchem Code:	2R
Emergency Response Guide No:	154
Limited Quantities	5 L

Proper Shipping Name: PHOSPHORIC ACID, SOLUTION

Segregation Dangerous Goods: Not to be loaded with explosives (Class 1), dangerous when wet substances (Class 4.3), oxidising agents (Class 5.1), organic peroxides (Class 5.2), radioactive substances (Class 7) or food and food packaging in any quantity. Note 1: Concentrated strong alkalis are incompatible with concentrated strong acids. Note 2: Concentrated strong acids are incompatible with concentrated strong alkalis. Note 3: Acids are incompatible with Dangerous Goods of Class 6 which are cyanides. Exemptions may apply.

MARINE TRANSPORT

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.



UN No:	1805
Dangerous Goods Class:	8
Packing Group:	III

Proper Shipping Name: PHOSPHORIC ACID, SOLUTION

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AIR TRANSPORT

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.



UN No: 1805
Dangerous Goods Class: 8
Packing Group: III
Proper Shipping Name: PHOSPHORIC ACID, SOLUTION

15. REGULATORY INFORMATION

This material/constituent(s) is covered by the following requirements:

The Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) established under the Therapeutic Goods Act (Commonwealth): S5 Caution

AICIS Status: All components of this product are listed on or exempt from the Australian Inventory of Industrial Chemicals (AIIC).

16. OTHER INFORMATION

Reason for issue: 5 Yearly Revision
Supersedes: 13-Dec-2016
Review by: 27-Sep-2029

This information was prepared in good faith from the best information available at the time of issue. It is based on the present level of research and to this extent we believe it is accurate. However, no guarantee of accuracy is made or implied and since conditions of use are beyond our control, all information relevant to usage is offered without warranty. The manufacturer will not be held responsible for any unauthorised use of this information or for any modified or altered versions.

If you are an employer, it is your duty to tell your employees, and any others that may be affected, of any hazards described in this sheet and of any precautions that should be taken.

Safety Data Sheets are updated frequently. Please ensure you have a current copy.