

Safety Data Sheet

Section 1: IDENTIFICATION

RENEW

Recommended Use: Chemical Cleaner and Descaler

Product Code: See Manufacturers Code

| | |
|-----------------------------|---|
| Company: | MICHALIS GROUP PTY LTD TRADING AS ALL-PRO CHEMICAL AND CLEANING SUPPLIES |
| Address: | 3/7 AYRSHIRE CRESCENT, SANDGATE N.S.W 2304 |
| Telephone Number: | (02) 4968 2000 |
| Emergency Telephone Number: | Poisons Information Centre: Westmead NSW Australia 131126 |

| | | |
|------------------------------------|-------|--------|
| Manufacturers Product Code: | RENEW | (5L) |
| | RENEW | (25L) |
| | RENEW | (205L) |

Section 2: HAZARDS

Classified as hazardous according to the criteria of the NOHSC.

Dangerous Goods Class 8 – Corrosive.



R34, R41: Causes burns. Risk of serious damage to eyes.

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Section 3: COMPOSITION INFORMATION

| Ingredient | CAS No | Proportion |
|--------------------------|-----------|------------|
| Phosphoric acid | 7664-38-2 | 65 % |
| Non hazardous surfactant | secret | 1-5 % |
| Water | 7732-18-5 | to 100 % |

Section 4: FIRST AID

Eyebaths or eyewash stations and safety deluge showers should be provided where this product is being used.

If poisoning occurs, contact a Doctor or Poisons Information Centre. Phone 13 1126 from anywhere in Australia.

Swallowed: If swallowed, do NOT induce vomiting. Give a glass of water. Seek immediate medical attention.

Eyes: If this product comes into contact with eyes, hold open and flood with water for at least 15 minutes. Do not try to remove contact lenses unless trained. Seek immediate medical attention.

Skin: If skin contact occurs, remove contaminated clothing and wash skin thoroughly. Seek medical attention. If safety shower is available, use it promptly. If you have the time and resources, see if you can neutralise the corrosive medium, especially if on face, in eyes or in/on other sensitive areas.

Inhalation: Remove from contaminated area.

Advice to Doctor: Treat symptomatically. Note the nature of this product.

Section 5: FIREFIGHTING MEASURE

Flashpoint: Does not burn.

Flammability limits: Not applicable. This product does not burn.

Extinguishing Media: This product does not burn. Use extinguishing media suited to the materials that are burning. Water fog or fine spray is the preferred medium for large fires.

Special Fire Fighting procedures: If a significant quantity of this product is involved in a fire, call the fire brigade. Immediately evacuate the area of unnecessary personnel. When fighting fires involving significant quantities of this product, wear safety boots, non-flammable overalls, gloves, hat, goggles and respirator. All skin areas should be covered. Ensure that no spillage enters drains or water courses.

Unusual Fire & Explosion Hazards: Likely to decompose only after heating to dryness followed by further strong heating.

Stability: This product is unlikely to spontaneously decompose.

Polymerisation: This product is unlikely to spontaneously polymerise.

Decomposition Products: No significant quantities of decomposition products are expected at temperatures normally achieved in a fire.

Materials to avoid: Bases. Contact with some metals may liberate hydrogen gas, which forms explosive mixtures in air.

Section 6: ACCIDENTAL RELEASE MEASURES

In the event of a major spill, prevent spillage from entering drains or water courses. Evacuate the spill area and deny entry to unnecessary and unprotected personnel. Wear full protective chemically resistant clothing including face mask, face shield, gauntlets and self contained breathing apparatus. See below under Personal Protection regarding Australian Standards relating to personal protective equipment. Stop leak if safe to do so, and contain spill. Absorb onto sand, vermiculite or other suitable absorbent material. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage. Recycle containers wherever possible. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. Contaminated area may be neutralised by washing with weak or dilute alkali. This material may be suitable for approved landfill. Dispose of only in accord with all regulations. Advise laundry of nature of contamination when sending contaminated clothing to laundry.

Section 7: HANDLING AND STORAGE

Precautions for Safe Handling

Ensure an eye bath and safety shower are available and ready for use. Observe good personal hygiene practices and recommended procedures. Wash thoroughly after handling. Take precautionary measures against static discharges by bonding and grounding equipment. Liquid phosphoric acid will attack some plastics. Avoid contact with eyes, skin and clothing. Do not inhale vapour/fumes.

Conditions for Safe Storage (Including Any Incompatibles)

Store in a cool, dry, well-ventilated area. Keep containers tightly closed when not in use. Inspect regularly for deficiencies such as damage or leaks. Protect against physical damage. Store away from incompatible materials such as oxidising agents, reactive metals zinc and bare steel, strong reducing agents, fluorine, metals, metal oxides, metal alloys, strong bases, sulfur trioxide, phosphorous pentoxide, and sources of ignition. Liquid phosphoric acid will attack some plastics. Provide sufficient heating to prevent crystallisation. Protect from excessive heat, moisture and static charges. This product has a UN Classification of 1805 and a Dangerous Goods Class 8 (corrosive) according to The Australian Code for the Transport of Dangerous Goods by Road and Rail.

Container Type

Packaging must comply with requirements of Hazardous Substances (Packaging) Regulations 2001. Store in original packaging as approved by manufacturer. NOTE: Use corrosion-resistant, acid-proof containers.

Section 8: EXPOSURE CONTROL/ PERSONAL PROTECTION

Exposure Standards

A time weighted average (TWA) has been established for Phosphoric acid, present in significant quantities in this product. This value is 1mg/m³. The corresponding STEL level is 3mg/m³. The STEL (Short Term Exposure Limit) is an exposure value that should not be exceeded for more than 15 minutes and should not be repeated for more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The exposure value at the TWA is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. See ingredients section on page 1 of this data sheet.

Engineering Controls

In industrial situations, concentration values below the TWA value should be maintained. Values may be reduced by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods. If you believe air borne concentrations of mists, dusts or vapours are high, you are advised to modify the process or environment to reduce the problem.

Personal Protection

Respiratory Protection: Respiratory protection should be provided to users. For help in selecting suitable equipment, consult AS/NZS 1715.

Protective Gloves: Impermeable protective gloves must be worn when you are using this product. All skin areas should be covered. Glove selection can be made on the basis of the following resistance for Inorganic acids based products. Neoprene: good. Rubber: good. Nitrile: good. Butyl: good.
For help in selecting suitable equipment, consult AS 2161.

Eye Protection: Protective eyewear must be worn when using this product. Coverage should extend to all facial areas. Eye contact will prove at best painful and may cause more serious damage. Consult AS1336 and AS/NZS 1337 for advice on Industrial Eye Protection.

Clothing: Clean impermeable overalls or protective clothing should always be worn when handling this product, preferably with an apron. If contaminated, laundry should be advised of the nature of the contamination. Consult AS2919 for advice on Industrial Clothing.

Safety Boots: Wearing safety boots in industrial situations is advisory. Consult AS/NZS2210 for advice on Occupational Protective Footwear.

Always wash hands before smoking, eating or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point/Melting Point: Approximately 100°C at 100kPa.

Odour: PUNGENT

Ignition Temperature: NOT APPLICABLE

pH: 1

Freezing point: NOT AVAILABLE

Vapour Density: NOT AVAILABLE

Specific Gravity: 1.44

Flashpoint (°C): NOT RELEVANT

Vapour Pressure: (pascals pr mm of Hg at 25°C): NOT AVAILABLE

Appearance: CLEAR LIQUID

Upper and Lower Flammability limits (in air): NOT APPLICABLE

Solubility (g/l): NOT AVAILABLE
(DILUTABLE)

Section 10: STABILITY AND REACTIVITY

Chemical Stability Product is stable under normal conditions of use, storage and temperature. Hygroscopic (sensitive to moisture).

Conditions to Avoid Avoid excessive heat, direct sunlight, moisture, freezing, static charges and high temperatures.

Incompatible Materials Incompatible with oxidising agents, reactive metals zinc and bare steel, strong reducing agents, fluorine, metals, metal oxides, metal alloys, strong bases, sulfur trioxide, phosphorous pentoxide, and sources of ignition.

Hazardous Decomposition Products Fumes produced when heated to decomposition may include corrosive phosphorous oxides. This product transforms to pyrophosphoric acid at 200°C.

Hazardous Reactions Hazardous polymerisation is not likely to occur when stored correctly. Contact with reactive metals may evolve highly flammable hydrogen gas. Danger of explosion if hydrogen gas evolved in confined area.

Section 11: TOXICOLOGICAL INFORMATION

No specific data is available for the product for chronic exposure symptoms. The ingredients are not listed as carcinogenic in Worksafe's document "Exposure Standards for Atmospheric Contaminants in the Occupational Environment" (May 1995).

Acute Effects

Swallowed: Data suggests that this product is toxic if swallowed. Ingestion of small quantities may cause harm. This product is also corrosive to the gastrointestinal tract. Will cause burning to mouth and throat.

Eye: This product is corrosive to the eyes. It will quickly cause pain, and corrosion of the eye. Unless exposure is quickly treated, permanent damage may occur.

Skin: This product is corrosive to skin.

Inhalation: Data suggests that this product is slightly toxic if inhaled.

TOXICITY DATA

Phosphoric acid

LD50 1530mg/kg (oral, rat)

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity Not available.

Persistence and degradability Not available.

Mobility Not available.

Section 13: DISPOSAL CONSIDERATIONS

| | |
|----------------------------|--|
| Disposable method | Refer to State/ Territory Land Waste Management Authority. Dispose of material through a licensed waste contractor. Rinse empty containers thoroughly before recycling or disposing to an authorized landfill. |
| Special precautions | Normally suitable for incineration by approved agent. |

Section 14: TRANSPORT INFORMATION

UN Number 1805

Shipping Name PHOSPHORIC ACID

Dangerous Goods Class 8

Subsidiary Risk Not applicable.

Pack Group III

Precaution for User CORROSIVE

Hazchem Code 2R

Section 15: REGULATORY INFORMATION

Poisons Schedule 6

EPG 37

AICS Name PHOSPHORIC ACID

All ingredients are listed in the Australia Inventory of Chemical Substances (AICS).

Section 16: OTHER INFORMATION

Prepared By: Ian Barkley
Position: Managing Director

Date of preparation: 1st July 2014

Legend to Abbreviations and Acronyms

AICS Australian Inventory of Chemical Substances

CAS Chemical Abstracts Service (Registry Number)

deg C ('C) degrees Celsius

EPG Emergency Procedure Guide

G gram

g/l grams per litre

Kg kilogram

kPa Kilo pascal – metric unit to measure pressure

LD50 LD stands for Lethal Dose. LD50 is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals

Ltr (L) Litre

m³ cubic metre

mg milligram

mg/kg milligrams per kilogram

mg/m³ milligrams per cubic metre

Mm millimetre

NOHSC National Occupational Health and Safety Commission

STEL Short Term Exposure Limit

SUSDP Standard for the Uniform Scheduling of Drugs and Poisons

TWA Time Weighted Average

UN United Nations (number)