

# SAFETY DATA SHEET



## DESCALER

APPLIED PRODUCTS AUSTRALIA PTY LTD

Catalogue number: AP280

Version No: 2.7

Issue date: 07/12/2016

Safety Data sheet according to WHS and ADG requirements

### SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

#### Product Identifier

Product name	DESCALER
Synonyms	AP280
Proper shipping name	PHOSPHORIC ACID, SOLUTION
Other means of identification	Not Available

#### Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	Descaling of Dishwashers, Bain Maries and Urns
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#### Details of the supplier of the safety data sheet

Registered company name	APPLIED PRODUCTS AUSTRALIA PTY LTD
Address	11 Gamma Close, Beresfield 2322 NSW Australia
Telephone	(02) 4966 5516
Fax	(02) 4966 5510
Website	www.actichem.com.au
Email	info@actichem.com.au

#### Emergency telephone number

Association / Organisation	Poisons Information Centre
Emergency telephone numbers	13 1126
Other emergency telephone numbers	Not Available

### SECTION 2 HAZARDS IDENTIFICATION

#### Classification of the substance or mixture

HAZARDOUS CHEMICAL. DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.

Poisons Schedule	6
GHS Classification [1]	Serious Eye Damage Category 1, Skin Corrosion/Irritation Category 1B, Metal Corrosion Category 1
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HSIS; 3. Classification drawn from EC Directive 1272/2008 - Annex VI

#### Label elements

GHS label elements	
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SIGNAL WORD	<b>DANGER</b>
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#### Hazard statement(s)

H318	Causes serious eye damage
H314	Causes severe skin burns and eye damage
H290	May be corrosive to metals

#### Precautionary statement(s) Prevention

P260	Do not breathe fumes / gas / mist / vapours / spray.
P280	Wear protective gloves / protective clothing / eye protection / face protection.
P234	Keep only in original container.

**Precautionary statement(s) Response**

P301+P310+P330+P331	IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting.
P303+P310+P361+P353	IF ON SKIN (or hair): Immediately call a POISON CENTER or doctor. Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P310+P351+P338	IF IN EYES: Immediately call a POISON CENTER or doctor. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304+P310+P340	IF INHALED: Immediately call a POISON CENTER or doctor. Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P363	Wash contaminated clothing before reuse.
P390	Absorb spillage to prevent material damage.

**Precautionary statement(s) Storage**

P405	Store locked up
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**Precautionary statement(s) Disposal**

P501	Dispose of contents/container in accordance with local regulations.
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**SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS****Substances**

See section below for composition of Mixtures

**Mixtures**

CAS No	%[weight]	Name
7664-38-2	30-60	phosphoric acid

**SECTION 4 FIRST AID MEASURES****Description of first aid measures**

<b>Eye Contact</b>	<p>If this product comes in contact with the eyes:</p> <p>Obtain medical advice / attention without delay.</p> <p>Immediately hold eyelids apart and flush the eye continuously with running water.</p> <p>Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.</p> <p>Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.</p> <p>If required, transport to hospital or doctor without delay.</p> <p>Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.</p>
<b>Skin Contact</b>	<p>If skin or hair contact occurs:</p> <p>Obtain medical advice / attention without delay.</p> <p>Immediately flush body and clothes with large amounts of water, using safety shower if available.</p> <p>Quickly remove all contaminated clothing, including footwear.</p> <p>Wash skin and hair with running water. Continue flushing with water until advised to stop by the Poisons Information Centre.</p> <p>If required, transport to hospital, or doctor.</p>
<b>Inhalation</b>	<p>If fumes or combustion products are inhaled remove from contaminated area.</p> <p>Obtain medical advice / attention without delay.</p> <p>Lay patient down. Keep warm and rested.</p> <p>Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.</p> <p>Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.</p> <p>If required, transport to hospital, or doctor.</p> <p>Inhalation of vapours or aerosols (mists, fumes) may cause lung oedema.</p> <p>Corrosive substances may cause lung damage (e.g. lung oedema, fluid in the lungs).</p> <p>As this reaction may be delayed up to 24 hours after exposure, affected individuals need complete rest (preferably in semi-recumbent posture) and must be kept under medical observation even if no symptoms are (yet) manifested.</p> <p>Before any such manifestation, the administration of a spray containing a dexamethasone derivative or beclomethasone derivative may be considered.</p> <p><b>This must definitely be left to a doctor or person authorised by him/her.</b></p>
<b>Ingestion</b>	<p>For advice, contact a Poisons Information Centre or a doctor at once.</p> <p>Urgent hospital treatment is likely to be needed.</p> <p><b>If swallowed do NOT induce vomiting.</b></p> <p>If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.</p> <p>Observe the patient carefully.</p> <p>Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.</p>

**Indication of any immediate medical attention and special treatment needed**

Treat symptomatically.

**INGESTION**

Immediate dilution (milk or water) within 30 minutes post ingestion is recommended.

**DO NOT attempt to neutralise the acid since exothermic reaction may extend the corrosive injury.**

Be careful to avoid further vomit since re-exposure of the mucosa to the acid is harmful. Limit fluids to one or two glasses in an adult.

Charcoal has no place in acid management.

**SKIN:**

Skin lesions require copious saline irrigation. Treat chemical burns as thermal burns with non-adherent gauze and wrapping..

**EYE:**

Eye injuries require retraction of the eyelids to ensure thorough irrigation of the conjunctival cul-de-sacs. Irrigation should last at least 20-30 minutes.

**DO NOT use neutralising agents or any other additives.**

Several litres of saline are required.

## SECTION 5 FIREFIGHTING MEASURES

### Extinguishing media

Extinguishing media	Water spray or fog. Foam. Dry chemical powder. BCF (where regulations permit). Carbon dioxide.
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### Special hazards arising from the substrate or mixture

Fire incompatibility	None known
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### Advice for firefighters

Fire Fighting	Alert Fire Brigade and tell them location and nature of hazard. Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or water course. Use firefighting procedures suitable for surrounding area. <b>Do not approach containers suspected to be hot.</b> Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire. Equipment should be thoroughly decontaminated after use.
Fire/Explosion Hazard	Non-combustible. Not considered to be a significant fire risk. Acids may react with metals to produce hydrogen, a highly flammable and explosive gas. Heating may cause expansion or decomposition leading to violent rupture of containers. May emit corrosive, poisonous fumes. May emit acrid smoke. Decomposition may produce toxic fumes of: phosphorus oxides (POx)

## SECTION 6 ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

Minor Spills	Check regularly for spills and leaks. Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. Control personal contact with the substance, by using protective equipment. Contain and absorb spill with sand, earth, inert material or vermiculite. Wipe up. Place in a suitable, labelled container for waste disposal.
Major Spills	Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or water course. Stop leak if safe to do so. Absorb on sand, dirt, vermiculite or similar absorbent material. Place into labelled drums and dispose of according to local government regulations. Immediately notify emergency services (Police or Fire Brigade) if the spill is too large for you to safely and effectively handle.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

## SECTION 7 HANDLING AND STORAGE

### Precautions for safe handling

Safe handling	Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. <b>WARNING: To avoid violent reaction, ALWAYS add material to water and NEVER water to material.</b> When handling, <b>DO NOT eat, drink or smoke.</b> Keep containers securely sealed when not in use. Always wash hands with soap and water after handling.
Other information	Store in original containers. Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers. Protect containers against physical damage and check regularly for leaks. Observe manufacturer's storage and handling recommendations contained within this SDS.

### Conditions for safe storage, including any incompatibilities

Suitable container	<b>DO NOT REPACK - Store only in original packaging.</b>
Storage incompatibility	Store away from strong alkalis and metals.

## SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

### Control parameters

#### OCCUPATIONAL EXPOSURE LIMITS (OEL)

#### INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	phosphoric acid	Phosphoric acid	1 mg/m3	3 mg/m3	Not Available	Not Available


#### EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
phosphoric acid	Phosphoric acid	Not Available	Not Available	Not Available

Ingredient	Original IDLH	Revised IDLH
phosphoric acid	10,000 mg/m3	1,000 mg/m3

### Exposure controls

<b>Appropriate engineering controls</b>	Maintain adequate ventilation at all times. In most circumstances natural ventilation systems are adequate. If ventilation is poor, then the use of a local exhaust ventilation system is recommended.
<b>Personal protection</b>	
<b>Eye and face protection</b>	Safety glasses with unperforated side shields OR Chemical goggles. Full face shield (20 cm, 8 in minimum) may be required for supplementary but never for primary protection of eyes; these afford face protection. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly.
<b>Skin protection</b>	See Hand protection below
<b>Hands/feet protection</b>	Elbow length Neoprene gloves When handling corrosive liquids, wear trousers or overalls outside of boots, to avoid spills entering boots.
<b>Body protection</b>	See Other protection below
<b>Other protection</b>	Overalls. PVC Apron. Eyewash unit. Ensure there is ready access to a safety shower.
<b>Thermal hazards</b>	Not Available

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Appearance</b>	Green liquid		
<b>Physical state</b>	Liquid	<b>Relative density (Water = 1)</b>	1.2
<b>Odour</b>	Not Available	<b>Viscosity (cSt)</b>	Not Available
<b>Odour threshold</b>	Not Available	<b>Auto-ignition temperature(°C)</b>	Not Applicable
<b>pH (as supplied)</b>	1	<b>Decomposition temperature</b>	Not Available
<b>Melting point / freezing point (°C)</b>	Not Available	<b>Partition coefficient n-octanol / water</b>	Not Available
<b>Initial boiling point and boiling range (°C)</b>	Not Available	<b>Surface Tension (dyn/cm or mN/m)</b>	Not Available
<b>Flash point (°C)</b>	Not Applicable	<b>Taste</b>	Not Available
<b>Evaporation rate</b>	Not Available	<b>Explosive properties</b>	Not Available
<b>Flammability</b>	Not Applicable	<b>Oxidising properties</b>	Not Available
<b>Upper Explosive Limit (%)</b>	Not Applicable	<b>Molecular weight (g/mol)</b>	Not Available
<b>Lower Explosive Limit(%)</b>	Not Applicable	<b>Volatile Component (%vol)</b>	Not Available
<b>Vapour pressure (kPa)</b>	Not Available	<b>Gas group</b>	Not Available
<b>Solubility in water (g/L)</b>	Miscible	<b>pH as a solution (1%)</b>	Not Available
<b>Vapour density (Air = 1)</b>	Not Available	<b>VOC g/L</b>	Not Available

## SECTION 10 STABILITY AND REACTIVITY

<b>Reactivity</b>	See section 7
<b>Chemical stability</b>	Contact with alkaline material liberates heat
<b>Possibility of hazardous reactions</b>	See section 7
<b>Conditions to avoid</b>	See section 7
<b>Incompatible materials</b>	See section 7
<b>Hazardous decomposition products</b>	See section 5

**SECTION 11 TOXICOLOGICAL INFORMATION****Information on toxicological effects**

<b>Inhaled</b>	The material may produce respiratory tract irritation, and result in damage to the lung including reduced lung function. The material has <b>NOT</b> been classified by EC Directives or other classification systems as 'harmful by inhalation'. This is because of the lack of corroborating animal or human evidence.
<b>Ingestion</b>	Ingestion of acidic corrosives may produce burns around and in the mouth, the throat and oesophagus. Immediate pain and difficulties in swallowing and speaking may also be evident.
<b>Skin Contact</b>	Skin contact with acidic corrosives may result in pain and burns; these may be deep with distinct edges and may heal slowly with the formation of scar tissue. Skin contact is not thought to have harmful <u>health</u> effects (as classified under EC Directives); but the material may still produce health damage following entry into the blood-stream, through, for example, cuts, abrasions or lesions and may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.
<b>Eye</b>	If applied to the eyes, this material causes severe eye damage. Direct eye contact with acid corrosives may produce pain, tears, sensitivity to light and burns. Mild burns of the epithelia generally recover rapidly and completely.
<b>Chronic</b>	Repeated or prolonged exposure to acids may result in the erosion of teeth, swelling and/or ulceration of mouth lining. Irritation of airways to lung, with cough, and inflammation of lung tissue often occurs.

**SECTION 12 ECOLOGICAL INFORMATION****Toxicity****Persistence and degradability**

Ingredient	Persistence: Water/Soil	Persistence: Air
phosphoric acid	HIGH	HIGH

**Bio accumulative potential**

Ingredient	Bioaccumulation
phosphoric acid	LOW (LogKOW = -0.7699)

**Mobility in soil**

Ingredient	Mobility
phosphoric acid	HIGH (KOC = 1)

**SECTION 13 DISPOSAL CONSIDERATIONS****Waste treatment methods**

<b>Product / packaging disposal</b>	Recycle containers whenever possible. Product residues and containers should be disposed of in accordance with local government regulations
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**SECTION 14 TRANSPORT INFORMATION****Labels Required**

	
<b>Marine Pollutant</b>	NO
<b>HAZCHEM</b>	2R

**Land transport (ADG)**

<b>UN number</b>	1805				
<b>Packing group</b>	III				
<b>UN proper shipping name</b>	PHOSPHORIC ACID, SOLUTION				
<b>Environmental hazard</b>	No relevant data				
<b>Transport hazard class(es)</b>	<table border="1"> <tr> <td>Class</td> <td>8</td> </tr> <tr> <td>Sub risk</td> <td>Not Applicable</td> </tr> </table>	Class	8	Sub risk	Not Applicable
Class	8				
Sub risk	Not Applicable				
<b>Special precautions for user</b>	<table border="1"> <tr> <td>Special provisions</td> <td>223</td> </tr> <tr> <td>Limited quantity</td> <td>5 L</td> </tr> </table>	Special provisions	223	Limited quantity	5 L
Special provisions	223				
Limited quantity	5 L				

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## SECTION 15 REGULATORY INFORMATION

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

#### PHOSPHORIC ACID (7664-38-2) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards  
Australia Hazardous Substances Information System - Consolidated Lists  
Australia Inventory of Chemical Substances (AICS)

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## SECTION 16 OTHER INFORMATION

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### Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

A list of reference resources used to assist the committee may be found at: [www.chemwatch.net](http://www.chemwatch.net)

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

### Definitions and abbreviations

PC-TWA;	Permissible Concentration-Time Weighted Average
PC-STEL;	Permissible Concentration-Short Term Exposure Limit
IARC:	International Agency for Research on Cancer
ACGIH:	American Conference of Government Industrial Hygienists
STEL:	Short Term Exposure Limit
TEEL:	Temporary Emergency Exposure Limit
IDLH:	Immediate Danger to Life or Health Concentrations
OSF:	Odour Safety Factor
NOAEL:	No Observed Effects Level
TLV:	Threshold Limit Value
LOD:	Limit Of Detection
OTV:	Odour Threshold Value
BCF:	Bio Concentration Factors
BEI:	Biological Exposure Index

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**End of SDS**