

Safety Data Sheet Phosphoric Acid

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: Phosphoric Acid

Recommended Use: Descaling and Derusting solution

Supplier: Genesis Industrial Pty Ltd, 6 Ginger Street, Paget 4740 **Phone No:** 07 4999 9743

Emergency Phone No - 13 11 26 – Poisons Information Centre

2. HAZARDS IDENTIFICATION

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

This material is hazardous according to Safe Work Australia; HAZARDOUS SUBSTANCE.

Classification of the substance or mixture:

Category 1 Corrosive to metals Physical hazards

Category 4 Acute toxicity, oral Health hazards

Category 1 Skin corrosion/irritation

Category 1 Serious eye damage/eye irritation

Category 3 respiratory tract irritation Specific target organ toxicity, single exposure

Not classified. OSHA defined hazards

Signal word **Danger**



Hazard Statements (GHS-US) : H290 - May be corrosive to metals

H314 - Causes severe skin burns and eye damage

H318 - Causes serious eye damage

H401 - Toxic to aquatic life

Precautionary Statements (GHS-US) :

P234 - Keep only in original container

P260 - Do not breathe fume, mist, vapors, spray

P264 - Wash hands and forearms thoroughly after handling

P273 - Avoid release to the environment

P280 - Wear eye protection, face protection, protective gloves, protective clothing

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 victim 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 (see Section 4)

P363 - Wash contaminated clothing before reuse

P390 - Absorb spillage to prevent material damage

P405 - Store locked up

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

P501 - Dispose of contents/container to local, regional, national, and international regulations

Other Hazards

Other Hazards Not Contributing to the Classification: Not available

Unknown Acute Toxicity Not applicable

Response:

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P321 Specific treatment (see First Aid Measures on Safety Data Sheet).

P363 Wash contaminated clothing before re-use. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P310 Immediately call a POISON CENTER or doctor/physician.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P390 Absorb spillage to prevent material damage.

Storage:

P405 Store locked up.

P406 Store in corrosive resistant container with a resistant inner liner

Disposal:

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Poisons Schedule (SUSMP): S6

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS Number	Proportion	Hazard Codes
Water	7732-18-5	>50% -	
Phosphoric Acid	7664-38-2	40-45%	H290 H302 H314 H318
Other non hazardous ingredients		0-<10% N/A	

4. FIRST AID MEASURES

General: IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible).

Inhalation: Using proper respiratory protection, immediately move the exposed person to fresh air. Keep at rest and in a position comfortable for breathing. Give oxygen or artificial respiration if necessary. Seek immediate medical advice. Symptoms may be delayed.

Skin Contact: Remove/Take off immediately all contaminated clothing. Immediately flush skin with plenty of water for at least 60 minutes. Seek medical attention immediately if exposure is severe. Obtain medical attention if irritation develops or persists. Wash contaminated clothing before reuse.

Eye Contact: Rinse cautiously with water for at least 60 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

Ingestion: If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label.

Most important symptoms/effects, acute and delayed

Causes skin, eye , respiratory and digestive tract burns.

Indication of immediate medical attention and special treatment needed Treat symptomatically.

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

5. FIRE FIGHTING MEASURES

Suitable extinguishing media Use appropriate extinguishing media for any nearby fire.

Unsuitable extinguishing media None known.

Specific hazards arising from the chemical

Fire may produce irritating, corrosive and/or toxic gases.

Special protective equipment and precautions for firefighters

Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.

Fire-fighting equipment/instructions

Move containers from fire area if you can do it without risk. Use water spray to cool unopened containers.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Avoid inhalation of vapors and spray mist and contact with skin and eyes. Wear suitable protective clothing. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Stop the flow of material, if this is without risk. Prevent entry into waterways, sewer, basements or confined areas. A spill can be diluted with water and disposed of at proper facilities. Otherwise, absorb spill with vermiculite or other inert material, then place in a container for chemical waste.

DO NOT use combustible materials such as sawdust. Contaminated absorbent material may pose the same hazards as the spilled product.

Flush residual spill area with a large amount of water. Neutralize washings or spill area with soda ash or lime.

Environmental precautions Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground unless authorized by permit. Reporting of releases to appropriate regulatory agencies may be required.

7. HANDLING AND STORAGE

This material is a Scheduled Poison S6 and must be stored, maintained and used in accordance with the relevant regulations.

Precautions for safe handling:

Avoid skin and eye contact and breathing in vapour, mists and aerosols. Keep out of reach of children.

Conditions for safe storage, including any incompatibilities:

Store in a cool, dry, well ventilated place.

Store away from incompatible materials described in Section 10.

Do not store in aluminium or galvanised containers nor use die-cast zinc or aluminium bungs; steel bungs should be used.

Store away from foodstuffs.

Keep containers closed when not in use - check regularly for leaks.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters:

No value assigned for this specific material by Safe Work Australia. However, Workplace Exposure Standard(s) for constituent(s)

Phosphoric Acid: Peak Limitation = 3 mg/m³

As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.

Peak Limitation - Peak Limitation - a maximum or peak airborne concentration of a particular substance determined over the shortest analytically practicable period of time which does not exceed 15 minutes.

These Workplace 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 workplace 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.

Appropriate engineering controls:

Provide adequate general and local exhaust ventilation. Observe Occupational Exposure Limits and minimize the risk of inhalation. Use process enclosures, local exhaust ventilation, or other engineering controls to reduce airborne exposure at locations/operations where spray mist may be generated. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear approved chemical safety goggles. Wear face shield if there is risk of splashes. Wear a full-face respirator, if needed.

Skin protection

Hand protection Wear chemical-resistant, impervious gloves. Be aware that the liquid may penetrate the gloves. Frequent change is advisable. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

Respiratory protection If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Wear air supplied respiratory protection if exposure concentrations are unknown. In case of inadequate ventilation or risk of inhalation of vapors, use suitable respiratory equipment.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Handle in accordance with good industrial hygiene and safety practice.

OVERALLS, CHEMICAL GOGGLES, FACE SHIELD, GLOVES (Long), APRON, RUBBER BOOTS.



9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Clear Liquid
Odour:	Odourless
Solubility:	Miscible with water.
Specific Gravity:	1.40 @15°C
Relative Vapour Density (air=1):	2-3
Vapour Pressure (20 °C):	5 mm Hg (26°C)
Flash Point (°C):	Not applicable
pH	<1

10. STABILITY AND REACTIVITY

Reactivity	Contact with certain metals liberates flammable gas.
Chemical stability	Stable at normal conditions.
Possibility of hazardous reactions	Reacts with most metals to form flammable hydrogen gas.
Conditions to avoid	Elevated temperatures.
Incompatible materials	Combustible material. Organic material. Bases. Metals. Reducing agents.
Hazardous decomposition products	Phosphorus oxides. Phosphine.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Ingestion Harmful if swallowed. Causes digestive tract burns.

Inhalation May cause respiratory tract irritation.

Skin contact Causes severe skin burns. Causes permanent skin damage (scarring).

Eye contact Causes serious eye damage. Permanent eye damage or blindness could result.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: Contact may cause irritation with redness, tearing, pain, and/or blurred vision. Permanent eye damage or blindness could result.

Skin contact: Itching, redness, swelling, burning or blistering of skin.

Inhalation: May include sore throat, cough, burning sensation, shortness of breath and labored breathing.

Information on toxicological effects

Acute toxicity Harmful if swallowed. May cause chemical burns in mouth, esophagus and stomach.

Skin corrosion/irritation Causes severe skin burns.

Serious eye damage/eye irritation Causes serious eye damage.

Respiratory sensitization No data available.

Skin sensitization Not a skin sensitizer.

Germ cell mutagenicity No data available.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

Reproductive toxicity No data available.

Specific target organ toxicity single exposure May cause respiratory tract irritation.

Specific target organ toxicity repeated exposure No data available.

Aspiration hazard Not classified.

Chronic effects Chronic or prolonged exposure may be associated with changes in pulmonary function, chronic bronchitis, dermatitis and erosion of dental enamel.

12. ECOLOGICAL INFORMATION

Ecotoxicity	Avoid contaminating waterways
Persistence and degradability	No data available.
Bioaccumulative potential	No data available.
Mobility in soil	This product is water soluble and may disperse in soil.
Other adverse effects	The product may affect the acidity (pH-factor) in water with risk of harmful effects to aquatic organisms.

13. DISPOSAL CONSIDERATIONS

Disposal instructions Do not allow this material to drain into sewers/water supplies. Dispose in accordance with all applicable regulations.

Hazardous waste code D002: Corrosive waste

Waste from residues / unused products

Disposal recommendations are based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. TRANSPORT INFORMATION

Road and Rail Transport

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.



UN No: 1805
 Transport Hazard
 Class: 8 Corrosive
 Packing Group: III
 Proper Shipping Name or Technical Name: Phosphoric Acid Solution
 Hazchem or Emergency Action Code: 2R

15. REGULATORY INFORMATION

Classification: This material is hazardous according to Safe Work Australia; HAZARDOUS SUBSTANCE.

Classification of the substance or mixture:

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Poisons Schedule (SUSMP): S6 Poison

Hazard Statements (GHS) :

H290 - May be corrosive to metals

H314 - Causes severe skin burns and eye damage

H318 - Causes serious eye damage

H401 - Toxic to aquatic life

All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS).

Section 16. Other Information

This MSDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user must review this SDS in the context of how the product will be handled in the workplace and in conjunction with other materials. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.

Contact Person/Point Genesis Industrial Pty Ltd, Technical Manager