SAFETY DATA SHEET

Section 1. Identification of the material and the supplier

Product:	**Metal-Etch**
Item Code:	4091
Product Use:	Metal Cleaner
Restriction of Use:	Refer to Section 15
Australian Supplier:	**Norglass Paints**
Address:	59 Moxon Road Punchbowl NSW 2196 Australia
Telephone:	+61 2 9708 2200
Email:	techinfo@norglass.com.au
New Zealand Supplier:	xxx
Address:	xxx xxx
Telephone:	0508 724687
Emergency Numbers:	
Australia:	**13 1126 (Poisons Information Centre)**
New Zealand:	**0800 764 766 (National Poison Centre)**
Date of SDS Preparation:	10 December 2023 v3

Section 2. Hazards Identification

Australia:
Classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia

New Zealand:
This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

EPA Approval No: HSR001545

Pictograms

Signal Word: **DANGER**

GHS Classification and Category	Hazard Code	Hazard Statement
Acute oral toxicity Cat. 4	H302	Harmful if swallowed.
Corrosive to metals Cat. 1	H290	May be corrosive to metals.
Skin corrosion Cat. 1C	H314	Causes severe skin burns and eye damage.

Serious eye damage Cat. 1	H318	Causes serious eye damage.

Prevention Code	Prevention Statement
P102	Keep out of reach of children.
P103	Read carefully and follow all instructions.
P234	Keep only in original container.
P260	Do not breathe fumes or vapours.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P273	Avoid release to the environment.
P280	Wear protective clothing.

Response Code	Response Statement
P101	If medical advice is needed, have product container or label at hand.
P310	Immediately call a POISON CENTER or doctor/physician.
P363	Wash contaminated clothing before reuse.
P390	Absorb spillage to prevent material damage.
P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
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 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.

Storage Code	Storage Statement
P405	Store locked up.
P406	Store in corrosive resistant container with a resistant inner liner.

Disposal Code	Disposal Statement
P501	Dispose of according to Local Regulations or Authorities

Section 3. Composition / Information on Ingredients

Ingredients	Wt%	CAS NUMBER.
Phosphoric Acid	35	7664-38-2
Water	To bal	7732-18-5

Section 4. First Aid Measures

Routes of Exposure:

If in Eyes — Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

If on Skin — Wash with plenty of soap and water. Take off contaminated clothing and wash before re-use. Immediately call a POISON CENTER or doctor/physician.

If Swallowed — Rinse mouth. DO NOT induce vomiting. Give a glass of water. Never give anything to the mouth of an unconscious person. If vomiting occurs, place victim face downwards, with the head turned to the side and lower than the hips to prevent vomit entering the lungs. Call a POISON CENTER or doctor/physician if you feel unwell.

If Inhaled — Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Get medical advice if breathing becomes difficult.

Most important symptoms and effects, both acute and delayed

Symptoms:

Ingestion: Harmful if swallowed.
Inhalation: Not applicable.
Skin: Causes severe skin burns.
Eye: Causes serious eye damage.
Chronic: Not applicable.

Advice to Doctor — Treat symptomatically, as for strong acids.

Section 5. Fire Fighting Measures

Hazard Type	Non Flammable
Hazards from combustion products	The combustion product is Phosphorous Oxides.
Suitable Extinguishing media	Use appropriate media to extinguish source of fire. Water spray may be used to control vapour.
Precautions for firefighters and special protective clothing	Wear full body protection and self-contained breathing apparatus.
HAZCHEM CODE	**2R**

Section 6. Accidental Release Measures

Personal precautions:
Wear protective equipment as detailed in Section 8. Clear area of any unprotected personnel.

Environmental precautions:
Do not discharge into drains/surface waters/groundwater. Do not discharge into the subsoil/soil. Notify authorities if product enters sewers or public waters.

Spill and Disposal procedures:
Small spills can be neutralized with Sodium Bicarbonate or Baking Soda. Shovel residue into labelled containers for disposal according to local regulation.
Large spills neutralise with lime (CaO) or Soda Ash (Lime is the best). Residue should be disposed of according to Local Regulations.

Section 7. Handling and Storage

Precautions for Handling:

- Read carefully and follow all instructions.
- Keep only in original container.
- Do not breathe fumes or vapours.
- Wash hands thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Avoid release to the environment.
- Wear protective clothing.

Precautions for Storage:

- Store away from incompatible materials listed in Section 10.
- Store locked up.
- Store in corrosive resistant container with a resistant inner liner.
- Keep out of reach of children.
- This product should be stored in glass containers or other acid resistant materials.

- Protect containers from damage or breakage.
- Store in a cool, well ventilated place.
- Keep containers well closed.
- Store away from food, foodstuff, drinks and clothing.
- Do not re-use empty containers.
- If the product needs to be diluted, acid to be added slowly to water with extreme care, to prevent splashing. Acid vapours may accelerate metal corrosion.

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA ppm	TWA mg/m³	STEL ppm	STEL mg/m³
Phosphoric acid [7664-38-2]	-	1	-	-

Workplace Exposure Standard – Time Weighted Average (WES-TWA). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices APRIL 2022 13TH EDITION.

Engineering Controls

Use in well-ventilated area. Maintain concentrations below recommended exposure limits.

Personal Protection Equipment

Eyes	Wear safety goggles with side shields. Avoid wearing contact lenses.
Hands and Skin	Wear PVC, neoprene, butyl or Nitrile rubber gloves. Waterproof apron, safety boots must be worn. Trousers, long sleeved shirt and closed in shoes or safety footwear should be worn as a general precaution.
Respiratory	Avoid breathing vapours. If ventilation is not adequate then wear a respirator to the requirements of AS1715 and AS1716.
General	Observe good standards of hygiene and cleanliness.

Section 9 Physical and Chemical Properties

Appearance	Pale yellow viscous liquid
Odour	Odourless
Odour Threshold	Not available
pH	1.5
Boiling Point	158 – 200^{0}C
Melting Point	Not available
Freezing Point	Not available
Flash Point	Not available
Flammability	Not available
Upper and Lower Exposure Limits	Not available
Volatile Component	Not available
Vapour Pressure	Not available
Specific Gravity	1.22
Solubilities	Completely soluble
Partition Coefficient:	Not available
Auto-ignition Temperature	Not available
Decomposition	Not available

Temperature	
Kinematic Viscosity	Not available
Particle Characteristics	Not available
Acidity	Strong acid

Section 10. Stability and Reactivity

Stability of Substance	This product is stable under normal conditions.
Conditions to Avoid	Avoid bases. Corrosive attack on most metals. Avoid strong oxidising and reducing agents.
Incompatible Materials	Product reacts violently with sulphides, phosphides, cyanides, acetylates, fluorides, carbides. Reaction can release poisonous gases. Potentially dangerous reaction can occur with strong oxidising and reducing agents.
Hazardous Decomposition Products	Material does not burn. The combustion product is Phosphorous Oxides.

Section 11 Toxicological Information

Acute Effects:

Swallowed	Harmful if swallowed. LD50 (oral rats) 1530mg/kg.
Dermal	Not applicable. LD50 (rabbit skin) 2740mg/Kg
Inhalation	Not applicable.
Eye	Causes serious eye damage.
Skin	Causes severe skin burns.

Chronic Effects:

Carcinogenicity	Not applicable.
Reproductive Toxicity	Not applicable.
Germ Cell Mutagenicity	Not applicable.
Aspiration	Not applicable.
STOT/SE	Not applicable.
STOT/RE	Not applicable.

Individual component information:

Acute Toxicity:

Chemical Name	Oral – LD50	Dermal – LD50	Inhalation – LC50
Phosphoric acid (7664-38-2)	1530 mg/kg (rat)	2740mg/kg (rabbit)	-

Section 12. Ecotoxicological Information

Persistence and degradability	No data available
Bioaccumulation	No data available
Mobility in Soil	No data available
Other adverse effects	No data available

Section 13. Disposal Considerations

Disposal Method: Place recovered product into an appropriate waste container for disposal through appropriate waste company or specialized landfill in accordance with local regulations. Ensure container is sealed and isolated away from ignition sources.

Precautions: Ensure waste container containing recovered product or contaminated spill media is labelled "Hazardous Waste – Corrosive". If triple rinsing container, add rinsate to waste container for disposal.

Disposal methods to avoid: Do not allow to enter waterways.

Section 14 Transport Information

This product is classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code) (7th edition).

This product is classified as a Dangerous Good for transport in NZ ; NZS 5433:2020

Road, Rail, Sea and Air Transport

UN No	1805
Class - Primary	8
Packing Group	III
Proper Shipping Name	PHOSOHORIC ACID, SOLUTION
Marine Pollutant	No
Special Provisions	If the product's individual container is below 5L/kg, it can be transported as a non-DG as long as the product packaging is still labelled as per DG requirements and the driver is given safety information in accordance with Chapter 3.4 of the UNRTDG.

Section 15 Regulatory Information

Australia:
Classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

Classified as a **Schedule 5** Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

New Zealand:
This substance is classified hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

EPA Approval No - HSR001545

HSW (HS) Regulations 2017 and EPA Notices	Trigger Quantity
Certified Handler	Not required
Location Certificate	Not required
Tracking Trigger Quantities	Not required
Signage Trigger Quantities	1000L
Emergency Response Plan	1000L
Secondary Containment	1000L
Restriction of Use	Only use for the intended purpose.

Section 16 Other Information

Glossary

EC_{50}	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
HSW	Health and Safety at Work.

LC_{50}	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD_{50}	Lethal dose to kill 50% of test animals/organisms.
LEL	Lower explosive level.
OSHA	American Occupational Safety and Health Administration.
TEL	Tolerable Exposure Limit.
TLV	Threshold Limit Value-an exposure limit set by responsible authority.
UEL	Upper Explosive Level
WES	Workplace Exposure Limit

References:
Australia:

1. Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice.
2. Standard for the Uniform Scheduling of Medicines and Poisons.
3. Australian Code for the Transport of Dangerous Goods by Road & Rail.
4. Model Work Health and Safety Regulations, Schedule 10: Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.
5. Workplace exposure standards for airborne contaminants, Safe work Australia.
6. American Conference of Industrial Hygienists (ACGIH).
7. Globally Harmonised System of classification and labelling of chemicals.

New Zealand:

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices APRIL 2022 edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2020
5. HSW (Hazardous Substances) Regulations 2017

Disclaimer
This document has been prepared by TCC (NZ) Ltd and serves as the suppliers Safety Data Sheet ('SDS'). It is based on information concerning the product which has been provided to TCC (NZ) Ltd or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer. While TCC (NZ) have taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, TCC (NZ) Ltd accept no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS

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Please contact the Australian Manufacturer or New Zealand distributor, if further information is required.

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