



Safety Data Sheet

Phosphoric acid

Revision 2, 14/02/2023

1. IDENTIFICATION

Product Name	Phosphoric Acid $\geq 70\%$
Other Names	Phosphoric acid, 70%; Phosphoric acid, 75%; Phosphoric acid, 81%; Phosphoric acid, 85%
Uses	Food additives; Intermediate; Laboratory chemicals; Descaling compound/Scale solvent; Corrosion inhibitors; pH-corrective agent; Processing aid; Degreasing agent; Fertiliser; Metal surface treatment.
Chemical Family	No Data Available
Chemical Formula	H ₃ PO ₄
Chemical Name	Phosphoric acid, $\geq 70\%$ aqueous solution
Product Description	No Data Available

Contact Details of the Supplier of this Safety Data Sheet

Organisation	Location	Telephone
Aurora Cleaning Supplies	F1 / 5 Bungaleen Court Dandenong South VIC 3175	03 9768 2669

Emergency Contact Details

For emergencies only; DO NOT contact these companies for general product advice.

Organisation	Location	Telephone
Chemcall	Australia	1800-127406 +64-4-9179888
Chemcall	Malaysia	+64-4-9179888
Chemcall	New Zealand	0800-243622 +64-4-9179888
National Poisons Centre	New Zealand	0800-764766
CHEMTREC	USA & Canada	1-800-424-9300 CN723420 +1-703-527-3887

2. HAZARD IDENTIFICATION

Poisons Schedule (Aust) Schedule 6

Globally Harmonised System

Safety Data Sheet, Phosphoric acid, Revision 2, 14/02/2023

Hazard Classification

Hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)

Hazard Categories

Corrosive to Metals - Category 1
Acute Toxicity (Oral) - Category 4
Acute Toxicity (Inhalation) - Category 4
Skin Corrosion/Irritation - Category 1B
Serious Eye Damage/Irritation - Category 1

Pictograms



Signal Word

Danger

Hazard Statements

H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
H302 + H332 Harmful if swallowed or if inhaled.

Precautionary Statements

Prevention	P260	Do not breathe mist/vapour/spray.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	P270	Do not eat, drink or smoke when using this product.
	P271	Use only outdoors or in a well-ventilated area.
Response	P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
	P310	Immediately call a POISON CENTER or doctor.
	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.
	P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
	P363	Wash contaminated clothing before reuse.
	P304 + P340	IF INHALED: Remove victim to fresh air and keep comfortable for breathing.
Storage	P406	Store in corrosive resistant container with a resistant inner liner.
	P405	Store locked up.
Disposal	P501	Dispose of contents/container in accordance with local / regional / national / international regulations.

National Transport Commission (Australia)

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Dangerous Goods Classification

Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

HSNO Classifications

Health Hazards	6.1D	Substances that are acutely toxic - Harmful
	8.1A	Substances that are corrosive to metals
	8.2C	Substances that are corrosive to dermal tissue UN PGIII
	8.3A	Substances that are corrosive to ocular tissue

3. COMPOSITION/INFORMATION ON INGREDIENTS**Ingredients**

Chemical Entity	Formula	CAS Number	Proportion
Phosphoric acid	H ₃ PO ₄	7664-38-2	>=70 %
Water	H ₂ O	7732-18-5	<=30 %

4. FIRST AID MEASURES**Description of necessary measures according to routes of exposure**

Swallowed	IF SWALLOWED: Rinse mouth, then drink plenty of water. Do NOT induce vomiting. Immediately call a Poisons Information Centre or a doctor for emergency medical advice. Never give anything by mouth to an unconscious person. Immediate medical attention is required. Call an ambulance for transportation to hospital.
Eye	IF IN EYES: Immediately flush eyes with running water for several minutes, holding eyelids open and occasionally lifting the upper and lower lids. Remove contact lenses if present and easy to do. Avoid contaminating unaffected eye! Continue flushing until advised to stop by a Poisons Information Centre or a doctor, or for at least 15 minutes. Immediate medical attention is required. Call an ambulance for transport to hospital. Continue eye irrigation during transport. *All eye exposures to acid require medical evaluation following decontamination.
Skin	IF ON SKIN (or hair): Remove and isolate contaminated clothing and shoes. Immediately flush skin and hair with running water for at least 15 minutes. For minor skin contact, avoid spreading material on unaffected skin. Immediately call a Poisons Information Centre or a doctor for emergency medical advice. Wash contaminated clothing and shoes before reuse. Immediate medical attention is required. Call an ambulance for transport to hospital. Continue skin irrigation during transport.
Inhaled	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a Poisons Information Centre or a doctor for emergency medical advice. Give artificial respiration if victim is not breathing. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Administer oxygen if breathing is difficult. Call an ambulance for transport to hospital. Continue skin irrigation during transport. Call an ambulance for transport to hospital.
Advice to Doctor	Treatment is symptomatic and supportive. Keep victim calm and warm. Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. Show this safety data sheet (SDS) to the doctor in attendance. *The extent of injury depends on duration of exposure and concentration of liquid. Do not attempt to use chemicals to neutralize the exposure.
Medical Conditions Aggravated by Exposure	No information available.

5. FIRE FIGHTING MEASURES

General Measures	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. If safe to do so, move undamaged containers from fire area. Cool containers with water spray until well after fire is out. Avoid getting water inside containers.
Flammability Conditions	Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.
Extinguishing Media	If material is involved in a fire, use an extinguishing agent suitable for the surrounding fire.
Fire and Explosion Hazard	Contact with metals may evolve flammable hydrogen gas. Containers may explode when heated. Reacts violently with water. Will react with water or steam to produce heat and corrosive fumes.
Hazardous Products of Combustion	Fire or heat will produce irritating, toxic and/or corrosive gases, including Phosphorous oxides.
Special Fire Fighting Instructions	Contain runoff from fire control or dilution water - Runoff may be toxic and/or corrosive and may pollute waterways.
Personal Protective Equipment	Wear positive pressure self-contained breathing apparatus (SCBA) and liquid-tight chemical protective clothing. Structural firefighters' protective clothing provides limited protection in fire situations ONLY.
Flash Point	No Data Available

Lower Explosion Limit	No Data Available
Upper Explosion Limit	No Data Available
Auto Ignition Temperature	No Data Available
Hazchem Code	2R

6. ACCIDENTAL RELEASE MEASURES

General Response Procedure	No action shall be taken involving any personal risk or without suitable training. Ensure adequate ventilation - Ventilate enclosed spaces before entering. ELIMINATE all ignition sources. Do not touch or walk through spilled material. Do not breathe vapours and prevent contact with eyes, skin and clothing.
Clean Up Procedures	Absorb with earth, sand or other non-combustible material and transfer to a suitable container for disposal (see SECTION 13). *Contaminated absorbent material may pose the same hazard as the spilled product.
Containment	Stop leak if safe to do so - Prevent entry into waterways, drains or confined areas. Move containers from spill area.
Decontamination	After cleaning, flush away any residual traces with water. *Neutralize acids by applying basic substances (soda ash or lime) or use an acid spill kit. Adequate ventilation is required if soda ash is used, because of the consequent release of carbon dioxide gas.
Environmental Precautionary Measures	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Small spillages and decontamination run-off may be washed to drains with large quantities of water - Due care must be exercised to avoid unnecessary pollution of watercourses. Local authorities should be advised if significant spillages cannot be contained.
Evacuation Criteria	Spill or leak area should be isolated immediately. Keep unauthorised personnel away. Keep upwind and to higher ground.
Personal Precautionary Measures	Do not touch damaged containers or spilled material unless wearing appropriate protective clothing (see SECTION 8).

7. HANDLING AND STORAGE

Handling	Safety showers and eyewash facilities should be provided within the immediate work area for emergency use. Ensure adequate ventilation - Handle the material in a fume hood/cupboard or under local exhaust ventilation. Handle in accordance with good industrial hygiene and safety practice. Do not breathe mist/vapours/spray and prevent contact with eyes, skin and clothing. Do not ingest. Wear protective gloves/protective clothing/eye protection/face protection (see SECTION 8). CORROSIVE: Absorb spillage to prevent material damage (see SECTION 6). *When diluting, the acid should always be added slowly to water and in small amounts. Never use hot water and never add water to the acid - Water added to acid can cause uncontrolled boiling and splashing.
Storage	Store in a cool, dry and well-ventilated place, away from sources of heat and direct sunlight. Protect from freezing. Keep container closed when not in use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Protect from physical damage. Keep away from incompatible materials (see SECTION 10), food and feedstuffs. Store in accordance with local regulations. Use appropriate containment to avoid environmental contamination. Store locked up.
Container	Keep in the original container or an approved alternative made from a compatible material. Store in a corrosion resistant container with a resistant inner liner. Do not store in unlabelled containers. *Empty containers retain product residue and can be hazardous. Do not reuse container. Flammable concentrations of vapour may accumulate in the headspace of containers.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General	COMPONENT: Phosphoric acid (CAS No. 7664-38-2): - Safe Work Australia Exposure Standard: TWA = 1 mg/m ³ ; STEL = 3 mg/m ³ . - New Zealand Workplace Exposure Standard: TWA = 1 mg/m ³ . - OSHA PEL: TWA = 1 mg/m ³ . - NIOSH REL: TWA = 1 mg/m ³ ; STEL = 3 mg/m ³ . - Immediately dangerous to life or health (IDLH) concentration: 1,000 mg/m ³ .
Exposure Limits	No Data Available

Biological Limits	No information available.
Engineering Measures	A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. *Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Personal Protection Equipment	- Respiratory protection: Wear respiratory protection if, determined by a risk assessment, an inhalation risk exists. Recommended: Wear a suitable particulate/mist filter, full-facepiece respirator; Any supplied-air respirator with a full facepiece or self-contained breathing apparatus (refer to AS/NZS 1715 & 1716). - Eye/face protection: Wear appropriate eye protection to prevent eye contact. Recommended: Chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead. - Hand protection: Wear protective gloves. Recommended: Elbow-length impervious gloves, e.g. Butyl rubber (0.7 mm), Chloroprene rubber (0.5 mm), Viton (0.4 mm), Natural rubber (0.5 mm), Neoprene (0.5 mm). Do not use leather gloves. - Skin/body protection: Wear appropriate personal protective clothing to prevent skin contact. Recommended: Overalls, splash apron or equivalent chemical impervious (acid-resistant) outer garment, rubber boots. Personal protective equipment for the body, appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Special Hazards Precautions	Attacks many metals producing extremely flammable hydrogen gas which can form explosive mixtures with air.
Work Hygienic Practices	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands, forearms and face thoroughly after handling chemical products, before eating, drinking, smoking and using the lavatory and at the end of the working period. Remove contaminated clothing and protective equipment before entering eating areas. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Appearance	Clear liquid
Odour	Odourless or acidic odour
Colour	Colourless
pH	<2
Vapour Pressure	0.75 kPa (for 75%) (@ 20 °C)
Relative Vapour Density	>1 Air = 1
Boiling Point	135 - 158 °C
Melting Point	No Data Available
Freezing Point	No Data Available
Solubility	Miscible with water
Specific Gravity	1.58 - 1.81
Flash Point	No Data Available
Auto Ignition Temp	No Data Available
Evaporation Rate	No Data Available
Bulk Density	No Data Available
Corrosion Rate	No Data Available
Decomposition Temperature	No Data Available
Density	No Data Available
Specific Heat	No Data Available
Molecular Weight	No Data Available
Net Propellant Weight	No Data Available
Octanol Water Coefficient	No Data Available
Particle Size	No Data Available
Partition Coefficient	No Data Available
Saturated Vapour Concentration	No Data Available

Vapour Temperature	No Data Available
Viscosity	No Data Available
Volatile Percent	No Data Available
VOC Volume	No Data Available
Additional Characteristics	Attacks many metals producing extremely flammable hydrogen gas which can form explosive mixtures with air.
Potential for Dust Explosion	Not applicable.
Fast or Intensely Burning Characteristics	No information available.
Flame Propagation or Burning Rate of Solid Materials	No information available.
Non-Flammables That Could Contribute Unusual Hazards to a Fire	Reacts violently with water. Will react with water or steam to produce heat and corrosive fumes.
Properties That May Initiate or Contribute to Fire Intensity	Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.
Reactions That Release Gases or Vapours	Fire or heat will produce irritating, toxic and/or corrosive gases, including oxides of Phosphorus.
Release of Invisible Flammable Vapours and Gases	Contact with metals may evolve flammable hydrogen gas.

10. STABILITY AND REACTIVITY

General Information	The substance is a medium-strong acid; Reacts violently with bases. Reacts with metals liberating flammable hydrogen gas.
Chemical Stability	Stable under normal ambient and anticipated storage and handling conditions.
Conditions to Avoid	Avoid formation of mists/aerosols. Avoid overheating.
Materials to Avoid	Incompatible/reactive with strong oxidising agents, reducing agents, sulfides, phosphides, cyanides, acetylides, fluorides, silicides, carbides, strong caustic material, alloys, glass, leather, natural rubber, fluorine gas, arsenic trioxide.
Hazardous Decomposition Products	Under normal conditions of storage and use, hazardous decomposition products should not be produced. Fire or heat will produce irritating, toxic and/or corrosive gases, including oxides of Phosphorus.
Hazardous Polymerisation	Will not occur.

11. TOXICOLOGICAL INFORMATION

General Information	- Acute toxicity: Harmful if swallowed and if inhaled. CORROSIVE: May be fatal if swallowed! May irritate or burn mouth, throat, stomach, esophagus. May cause abdominal pain, chest pain, nausea, vomiting, diarrhoea, seizures, hemorrhaging, permanent damage. - Skin corrosion/irritation: Causes severe skin burns. CORROSIVE: May cause inflammation of this skin, ulceration, permanent skin damage. - Eye damage irritation: Causes serious eye damage. CORROSIVE: May cause ulcerations, conjunctivitis, permanent eye damage, blindness. - Respiratory/skin sensitisation: No information available. - Germ cell mutagenicity: No information available. - Carcinogenicity: This product does not contain 0.1% or more of the known or potential carcinogens listed in NTP, IARC, or OSHA. - Reproductive toxicity: No information available. - STOT (single exposure): Phosphoric acid has a low vapour pressure at room temperature and is not expected to present a significant inhalation hazard under ambient conditions. Phosphoric acid can, however, be irritating to the respiratory tract if inhaled as a mist or if the material is vaporized. Vapours or mists may irritate or burn respiratory tract, nose, mouth, throat. May cause persistent coughing, pulmonary edema, chemical pneumonitis, permanent damage. Effects may be delayed. - STOT (repeated exposure): No information available. - Aspiration toxicity: Aspiration into the lungs may occur during ingestion or vomiting, resulting in severe pulmonary injury.
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Acute

Ingestion	Acute toxicity (Oral): COMPONENT: Phosphoric acid (CAS No. 7664-38-2): - LD50, Rat: 1,250 mg/kg [Supplier's SDS].
Other	Acute toxicity (Dermal): COMPONENT: Phosphoric acid (CAS No. 7664-38-2): - LD50, Rabbit: 2,740 mg/kg [Supplier's SDS].
Inhalation	Acute toxicity (Inhalation): COMPONENT: Phosphoric acid (CAS No. 7664-38-2): - LD50, Rat: >850 mg/m3 (1 h) [Supplier's SDS].
Carcinogen Category	None

12. ECOLOGICAL INFORMATION

Ecotoxicity	No information available.
Persistence/Degradability	No information available.
Mobility	No information available.
Environmental Fate	May be harmful to the environment if released in large quantities. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. *While acidity of this material may be reduced readily in natural waters, the phosphate may persist indefinitely. Phosphates are plant nutrients and may contribute to the growth of phytoplankton in water.
Bioaccumulation Potential	No information available.
Environmental Impact	No Data Available

13. DISPOSAL CONSIDERATIONS

General Information	The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor.
Special Precautions for Land Fill	This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Since emptied containers retain product residue, follow label warnings even after container is emptied. DO NOT pressurize, cut, weld, solder, drill, grind or expose empty containers to heat, flame, sparks or other sources of ignition.

14. TRANSPORT INFORMATION**Land Transport (Australia)**

ADG Code

Proper Shipping Name	PHOSPHORIC ACID, SOLUTION
Class	8 Corrosive Substances
Subsidiary Risk(s)	No Data Available
EPG	37 Toxic And/Or Corrosive Substances Non-Combustible
UN Number	1805
Hazchem	2R
Pack Group	III

Special Provision No Data Available

Land Transport (Fiji)

Proper Shipping Name PHOSPHORIC ACID, SOLUTION
Class 8 Corrosive Substances
Subsidiary Risk(s) No Data Available
EPG 37 Toxic And/Or Corrosive Substances Non-Combustible
UN Number 1805
Hazchem 2R
Pack Group III
Special Provision No Data Available

Land Transport (Malaysia)

ADR Code

Proper Shipping Name PHOSPHORIC ACID, SOLUTION
Class 8 Corrosive Substances
Subsidiary Risk(s) No Data Available
EPG 37 Toxic And/Or Corrosive Substances Non-Combustible
UN Number 1805
Hazchem 2R
Pack Group III
Special Provision No Data Available

Land Transport (New Zealand)

NZS5433

Proper Shipping Name PHOSPHORIC ACID, SOLUTION
Class 8 Corrosive Substances
Subsidiary Risk(s) No Data Available
EPG 37 Toxic And/Or Corrosive Substances Non-Combustible
UN Number 1805
Hazchem 2R
Pack Group III
Special Provision No Data Available

Land Transport (Papua New Guinea)

Proper Shipping Name PHOSPHORIC ACID, SOLUTION
Class 8 Corrosive Substances
Subsidiary Risk(s) No Data Available
EPG 37 Toxic And/Or Corrosive Substances Non-Combustible
UN Number 1805
Hazchem 2R
Pack Group III
Special Provision No Data Available

Land Transport (United States of America)

US DOT

Proper Shipping Name PHOSPHORIC ACID, SOLUTION
Class 8 Corrosive Substances

Subsidiary Risk(s)	No Data Available
ERG	154 Substances - Toxic and/or Corrosive (Non-Combustible)
UN Number	1805
Hazchem	2R
Pack Group	III
Special Provision	No Data Available

Sea Transport

IMDG Code

Proper Shipping Name	PHOSPHORIC ACID, SOLUTION
Class	8 Corrosive Substances
Subsidiary Risk(s)	No Data Available
UN Number	1805
Hazchem	2R
Pack Group	III
Special Provision	No Data Available
EMS	F-A, S-B
Marine Pollutant	No

Air Transport

IATA DGR

Proper Shipping Name	PHOSPHORIC ACID, SOLUTION
Class	8 Corrosive Substances
Subsidiary Risk(s)	No Data Available
UN Number	1805
Hazchem	2R
Pack Group	III
Special Provision	No Data Available

National Transport Commission (Australia)

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Dangerous Goods Classification	Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)
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15. REGULATORY INFORMATION

General Information	PHOSPHORIC ACID
Poisons Schedule (Aust)	Schedule 6

Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

Approval Code	HSR001545 (Reissued)
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National/Regional Inventories

Australia (AIC)	Listed
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Canada (DSL)	Not Determined
Canada (NDSL)	Not Determined
China (IECSC)	Not Determined
Europe (EINECS)	Not Determined
Europe (REACH)	Not Determined
Japan (ENCS/METI)	Not Determined
Korea (KECI)	Not Determined
Malaysia (EHS Register)	Not Determined
New Zealand (NZIoC)	Listed
Philippines (PICCS)	Not Determined
Switzerland (Giftliste 1)	Not Determined
Switzerland (Inventory of Notified Substances)	Not Determined
Taiwan (NCSR)	Not Determined
USA (TSCA)	Not Determined

16. OTHER INFORMATION

Related Product Codes	PHACID0020, PHACID0100, PHACID0115, PHACID0116, PHACID0117, PHACID0118, PHACID0200, PHACID0202, PHACID0222, PHACID0300, PHACID0301, PHACID0310, PHACID0311, PHACID0320, PHACID0321, PHACID0325, PHACID0405, PHACID0410, PHACID0411, PHACID0415, PHACID0420, PHACID0430, PHACID0440, PHACID0441, PHACID0450, PHACID0470, PHACID0900, PHACID0925, PHACID1051, PHACID1052, PHACID1053, PHACID1058, PHACID1059, PHACID1060, PHACID1061, PHACID1066, PHACID1067, PHACID1068, PHACID1069, PHACID1070, PHACID1071, PHACID1073, PHACID1074, PHACID1075, PHACID1078, PHACID1079, PHACID1082, PHACID1084, PHACID1085, PHACID1088, PHACID1089, PHACID1090, PHACID1091, PHACID1234, PHACID2250, PHACID2350, PHACID2800, PHACID3010, PHACID3330, PHACID3800, PHACID4000, PHACID4004, PHACID4005, PHACID4006, PHACID6052, PHACID6055, PHACID6056, PHACID6600, PHACID6602, PHACID6900, PHACID7800, PHACID8000, PHACID8591, PHACID8600, PHACID8602, PHACID8700, PHACID8704, PHACID8705, PHACID8708, PHACID8709, PHACID8710, PHACID8800, PHACID8802, PHACID9650
Revision	2
Revision Date	14/02/2023
Key/Legend	< Less Than > Greater Than AICS Australian Inventory of Chemical Substances atm Atmosphere CAS Chemical Abstracts Service (Registry Number) cm² Square Centimetres CO₂ Carbon Dioxide COD Chemical Oxygen Demand deg C (°C) Degrees Celcius EPA (New Zealand) Environmental Protection Authority of New Zealand deg F (°F) Degrees Farenheit g Grams g/cm³ Grams per Cubic Centimetre g/l Grams per Litre HSNO Hazardous Substance and New Organism IDLH Immediately Dangerous to Life and Health immiscible Liquids are insoluable in each other. inHg Inch of Mercury inH₂O Inch of Water K Kelvin kg Kilogram

kg/m³ Kilograms per Cubic Metre

lb Pound

LC50 LC stands for lethal concentration. LC50 is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours.

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 or **L** Litre

m³ Cubic Metre

mbar Millibar

mg Milligram

mg/24H Milligrams per 24 Hours

mg/kg Milligrams per Kilogram

mg/m³ Milligrams per Cubic Metre

Misc or **Miscible** Liquids form one homogeneous liquid phase regardless of the amount of either component present.

mm Millimetre

mmH₂O Millimetres of Water

mPa.s Millipascals per Second

N/A Not Applicable

NIOSH National Institute for Occupational Safety and Health

NOHSC National Occupational Health and Safety Commission

OECD Organisation for Economic Co-operation and Development

Oz Ounce

PEL Permissible Exposure Limit

Pa Pascal

ppb Parts per Billion

ppm Parts per Million

ppm/2h Parts per Million per 2 Hours

ppm/6h Parts per Million per 6 Hours

psi Pounds per Square Inch

R Rankine

RCP Reciprocal Calculation Procedure

STEL Short Term Exposure Limit

TLV Threshold Limit Value

tne Tonne

TWA Time Weighted Average

ug/24H Micrograms per 24 Hours

UN United Nations

wt Weight