



1. IDENTIFICATION

Product Name Phosphoric Acid >=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 H3PO4

Chemical Name Phosphoric acid, >=70% aqueous solution

Product Description No Data Available

Contact Details of the Supplier of this Safety Data Sheet

Organisation	Location	Telephone
Redox Ltd	2 Swettenham Road Minto NSW 2566 Australia	+61-2-97333000
Redox Ltd	11 Mayo Road Wiri Auckland 2104 New Zealand	+64-9-2506222
Redox Inc.	3960 Paramount Boulevard Suite 107 Lakewood CA 90712 USA	+1-424-675-3200
Redox Chemicals Sdn Bhd	Level 2, No. 8, Jalan Sapir 33/7 Seksyen 33, Shah Alam Premier Industrial Park 40400 Shah Alam Sengalor, Malaysia	+60-3-5614-2111

Emergency Contact Details

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

Organisation	Location	Telephone
Poisons Information Centre	Westmead NSW	1800-251525 131126
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

Schedule 6 Poisons Schedule (Aust)

Globally Harmonised System



Phone E-mail ARN

+61 2 9733 3000 +61 2 9733 3111 svdnev@redox.com www.redox.com 92 000 762 345

Adelaide Brisbane Melbourne Perth Sydney

Auckland Kuala Lumpur Los Angeles Hawke's Bay Oakland Mexico London





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 ClassificationsHealth
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	H3PO4	7664-38-2	>=70 %
Water	H2O	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.

IF IN EYES: Immediately flush eyes with running water for several minutes, holding eyelids open and occasionally Eye 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

*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

*The extent of injury depends on duration of exposure and concentration of liquid. Do not attempt to use chemicals

take precautions to protect themselves. Show this safety data sheet (SDS) to the doctor in attendance.

to neutralize the exposure.

Medical Conditions Aggravated

by Exposure

No information available.

5. FIRE FIGHTING MEASURES

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be General Measures

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

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 LimitNo Data AvailableUpper Explosion LimitNo Data AvailableAuto Ignition TemperatureNo 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.

DecontaminationAfter 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 Av

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

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 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/m3; STEL = 3 mg/m3.

- New Zealand Workplace Exposure Standard: TWA = 1 mg/m3.

- OSHA PEL: TWA = 1 mg/m3.

- NIOSH REL: TWA = 1 mg/m3; STEL = 3 mg/m3.

- Immediately dangerous to life or health (IDLH) concentration: 1,000 mg/m3.

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 Precaustions

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 StateLiquidAppearanceClear liquidOdourOdourlessColourColourlessph<2</th>

Vapour Pressure 0.75 kPa (for 75%) (@ 20 °C)

Relative Vapour Density

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

Flame Propagation or Burning

Rate of Solid Materials

Non-Flammables That Could Contribute Unusual Hazards to a

No information available.

No information available.

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

hvdrogen 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. May be harmful in contact with skin. Corrosive on ingestion, may cause abdominal pain, burning sensation, shock or collapse.
- Skin corrosion/irritation: Causes severe skin burns. Contact with skin may cause redness, pain, blisters, skin burns.
- Eye damage irritation: Causes serious eye damage. Corrosive to eyes, may cause redness, pain, corneal burns resulting in permanent eye injury.
- Respiratory/skin sensitisation: No information available.
- Germ cell mutagenicity: No information available.
- Carcinogenicity: No information available.
- Reproductive toxicity: No information available.
- STOT (single exposure): Product mists or aerosols may cause respiratory irritation, burning sensation, cough, shortness of breath, sore throat. Prolonged exposures can cause necrosis of nasal passages and oedema of lungs.
- STOT (repeated exposure): No information available.
- Aspiration toxicity: No information available.

Acute

Ingestion Acute toxicity (Oral):

COMPONENT: Phosphoric acid (CAS No. 7664-38-2):

- LD50, Rat: 1,530 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

EcotoxicityNo information available.Persistence/DegradabilityNo information available.MobilityNo 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.

COMITACIO

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)

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

National/Regional Inventories

Australia (AICS) Listed

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 PHACID0100, PHACID0115, PHACID0116, PHACID0117, PHACID0118, PHACID0200, PHACID0202, PHACID0222,

PHACID0300, PHACID0301, PHACID0310, PHACID0311, PHACID0320, PHACID0321, PHACID0325, PHACID0405, PHACID0410, PHACID0411, 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, PHACID1234, PHACID2250, PHACID2350, PHACID2800, PHACID3010, PHACID3330, PHACID3800, PHACID4000, PHACID4004, PHACID6052, PHACID6055, PHACID6056, PHACID6000, PHACID6000, PHACID8709, PHACID8709, PHACID8709, PHACID8709, PHACID8709, PHACID8709, PHACID8708, PHACID8709, PHACID8708, PHACID8709, PHACID8708, PHACID8709, PHACID8708, PHACID8709, PHACID

PHACID8710, PHACID8800, PHACID8802, PHACID9650

Revision 2

Revision Date 28 Aug 2019

Key/Legend < Less Than

> Greater Than

AICS Australian Inventory of Chemical Substances

atm Atmosphere

CAS Chemical Abstracts Service (Registry Number)

cm² Square CentimetresCO2 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/I 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 MercuryinH2O Inch of WaterK Kelvin

kg Kilogram **kg/m³** Kilograms per Cubic Metre

Ib 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.

Itr 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 Heath 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