SAFETY DATA SHEET
AMMONIUM NITRATE (UN1942)
REVISION 4, DATE 01 JUN 2021

1. IDENTIFICATION

Product Name	**Ammonium Nitrate (UN1942)**
Other Names	Chemically Pure Ammonium Nitrate (CPAN); Porous Prilled Ammonium Nitrate (PPAN); Security Sensitive Ammonium Nitrate (SSAN)
Uses	Feed materials; Intermediates; Explosives; Fertilizers; Oxidizing agent; Pharmaceuticals.
Chemical Family	No Data Available
Chemical Formula	H4N2O3
Chemical Name	Nitric acid, ammonium salt
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

Poisons Schedule (Aust)	Not Scheduled

Globally Harmonised System

Hazard Classification			Hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)
Hazard Categories			Oxidising Solids - Category 3 Acute Toxicity (Oral) - Category 5 Serious Eye Damage/Irritation - Category 2A
Pictograms			
Signal Word			Warning
Hazard Statements		**H272**	May intensify fire; oxidizer.
		H303	May be harmful if swallowed.
		H319	Causes serious eye irritation.
		AUH031	Contact with acids liberates toxic gas
		AUH044	Risk of explosion if heated under confinement
Precautionary Statements	Prevention	**P210**	Keep away from heat.
		P221	Take any precaution to avoid mixing with combustibles/organic material.
		P280	Wear protective gloves/eye protection/face protection.
	Response	**P370 + P378**	In case of fire: Use water for extinction.
		P337 + P313	If eye irritation persists: Get medical advice.
		P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
		P312	Call a POISON CENTER or doctor if you feel unwell.
	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)

Safe Work Australia

National Guide for Classifying Hazardous Chemicals under the Model WHS Regulations

Hazard Classification	Hazardous according to the criteria of Safe Work Australia under Model WHS Regulations

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Ammonium nitrate	H4N2O3	6484-52-2	<=100 %

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

Swallowed	IF SWALLOWED: Rinse mouth with water, then drink plenty of water. Do NOT induce vomiting. Call a Poison Centre or doctor/physician for advice. Never give anything by mouth to an unconscious person.
Eye	IF IN EYES: Do not rub affected area! 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. Continue rinsing for at least 15 minutes. If eye irritation persists, get medical advice/attention.
Skin	IF ON SKIN: Immediately flush skin and hair with running water for at least 15 minutes, while removing contaminated clothing and shoes. If skin irritation occurs, get medical advice/attention. Wash contaminated clothing and shoes before reuse. *Contaminated clothing may be a fire risk when dry.
Inhaled	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get immediate medical advice/attention if respiratory symptoms occur. Give artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult.
Advice to Doctor	Keep victim calm and warm. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
Medical Conditions Aggravated by Exposure	No information available.

5. FIRE FIGHTING MEASURES

General Measures	Immediately contact Police or Fire Brigade. In Australia, tell them "Security Sensitive Ammonium Nitrate is involved in the incident". If safe to do so, move undamaged containers from fire areas. Do not move cargo or vehicle if cargo has been exposed to heat. Cool containers with flooding quantities of water until well after fire is out. Ensure that any molten road bitumen has been adequately cooled with water before allowing graders and so on to work on clean-up. *May react dangerously with hydrocarbons (fuels), organic matter, other contaminants or when hot, molten and confined, to form a mass explosive of Division 1.1. In this condition it should be treated as an explosive and the explosive public safety evacuation distances apply! Large fire: Consider initial evacuation of areas within at least 800 m in all directions.
Flammability Conditions	OXIDISING SOLID: Will not burn but will increase intensity of a fire. This substance will accelerate burning when involved in a fire. May ignite combustibles.
Extinguishing Media	Use flooding quantities of water, delivered as a heavy spray. Maintain flow of water until mass has cooled. Do not use dry chemical or Carbon dioxide (CO2) or foam. *Large Fire: Flood fire areas with water from protected position or use unmanned hose holders or monitor nozzles. If impossible to extinguish fire, protect surroundings, withdraw from area and allow fire to burn.
Fire and Explosion Hazard	Risk of violent reaction or explosion! May explode from heating or detonation if contaminated or confined. *Rigid containers may explode when strongly heated. FIBCs will melt and not contain pressure under similar conditions.
Hazardous Products of Combustion	Fire may produce irritating and/or toxic gases. When exposed to fierce heat, toxic oxides of nitrogen (brown fumes) are given off.
Special Fire Fighting Instructions	Contain runoff from fire control or dilution water - Runoff may cause pollution. Runoff may create fire hazard!
Personal Protective Equipment	In presence of fire, wear positive pressure self-contained breathing apparatus (SCBA) and chemical splash suit. Structural firefighter's uniform will provide limited protection.
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	1Y

6. ACCIDENTAL RELEASE MEASURES

General Response Procedure	Immediately contact Police or Fire Brigade. In Australia, tell them "Security Sensitive Ammonium Nitrate is involved in the incident". Ensure adequate ventilation - Ventilate closed spaces before entering. Prevent exposure to heat. ELIMINATE all ignition sources. Do not contaminate material - Keep combustibles (oil, fuel, wood, paper, clothing) away from spilled material. Clean up spillages immediately. Do not attempt to smother smouldering spillage in any way! Avoid breathing dust/fumes and contact with eyes, skin and clothing.
Clean Up Procedures	Use clean tools to transfer material to clean, dry plastic container and cover loosely. Move container from spill area. Do NOT return spilled material to original container for re-use! *This material is classified as a Security Sensitive Ammonium Nitrate (SSAN). Spillage recovery needs to be appropriately documented and material accurately accounted for.
Containment	Stop leak if you can do it without risk. Prevent entry into waterways, drains or confined areas.
Decontamination	Following product recovery, flush area with water.
Environmental Precautionary Measures	Spillages and decontamination runoff should be prevented from entering drains and watercourses.
Evacuation Criteria	Spill or leak area should be isolated immediately. Evacuate personnel to safe areas. Keep unauthorised personnel away. Keep upwind and to higher ground. Large spill: Consider initial downwind evacuation of areas within 100 m.
Personal Precautionary Measures	Do not touch damaged containers or spilled material unless wearing appropriate protective clothing (see SECTION 8). In absence of fire, wear overalls, safety glasses and protective gloves.

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 with care and in accordance with good industrial hygiene and safety practice. Avoid generating dust. Avoid breathing dust and contact with eyes, skin and clothing. Do not ingest. Wear protective gloves/protective clothing/eye protection/face protection (see SECTION 8). OXIDISING SOLID: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources - No smoking. Do not contaminate - Do not mix with other chemicals!
Storage	Store in a cool, dry and well-ventilated place, out of direct sunlight. Keep containers closed when not in use - check regularly for spills. Protect from moisture (hygroscopic). Keep away from heat, hot surfaces, sparks, open flames and other ignition sources - No smoking. Keep away from combustibles and other incompatible materials (see SECTION 10). Ensure ammonium nitrate is stored securely and in accordance with regulations/controls issued by relevant authority. *Concrete floors are recommended for storage. If ammonium nitrate is to be stored in bulk, the surface must be treated so that it is resistant to attack. Bulk ammonium nitrate should not be stored on a bituminous floor. Floor drains, recesses or other areas of possible confinement should be eliminated to prevent entrapment/confinement of molten (flowing) ammonium nitrate during a fire.
Container	Keep in the original container.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General	No specific exposure standards are available for this product. For dusts from solid substances without specific occupational exposure standards: - Safe Work Australia Exposure Standard (Nuisance dusts): 8 hr TWA = 10 mg/m3 (measured as inhalable dust). - New Zealand WES (Particulates not otherwise classified): TWA = 10 mg/m3; TWA = 3 mg/m3 (respirable dust). DECOMPOSITION PRODUCT: Nitrogen dioxide (CAS No. 10102-44-0): - Safe Work Australia Exposure Standard: TWA = 3 ppm (5.6 mg/m3); STEL = 5 ppm (9.4 mg/m3). - New Zealand Workplace Exposure Standard (interim WES): TWA = 1 ppm (1.9 mg/m3); Propose to change to TWA of 0.2 ppm in the year 2022.
Exposure Limits	No Data Available
	No information available.

Biological Limits	
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.
Personal Protection Equipment	- Respiratory protection: Wear respiratory protection in case of inadequate ventilation or if an inhalation risk exists. Recommended: Dust mask/particulate respirator or supplied-air respirator (refer to AS/NZS 1715 & 1716). - Eye/face protection: Wear appropriate eye protection to avoid eye contact. Recommended: Tightly-fitting goggles. - Hand protection: Wear protective gloves. Recommended: Impervious gloves, e.g. PVC gloves. - Skin/body protection: Wear appropriate personal protective clothing to avoid skin contact. Recommended: Wear fire/flame resistant/retardant clothing. Long sleeved clothing/Overalls, Boots.
Special Hazards Precaustions	This product when stored in a confined, unventilated space/hold can give off ammonia or other odour and lead to the depletion of oxygen within this space and other confined spaces. It is therefore essential that ventilation is carried out prior to entry.
Work Hygienic Practices	Do not eat, drink or smoke when using this product. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid
Appearance	Granules or prills
Odour	Odourless
Colour	White
pH	5.4 (0.1M sol'n)
Vapour Pressure	No Data Available
Relative Vapour Density	No Data Available
Boiling Point	Decomposes
Melting Point	160 - 170 °C
Freezing Point	No Data Available
Solubility	Very soluble in water - Slightly soluble in alcohol; Insoluble in acetone
Specific Gravity	1.72
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	210 °C
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	Hygroscopic: absorbs moisture or water from surrounding air.
Potential for Dust Explosion	No information available.
Fast or Intensely Burning Characteristics	Risk of violent reaction or explosion! May intensify fire; oxidiser. May explode from heating or detonation if contaminated or confined.
Flame Propagation or Burning Rate of Solid Materials	No information available.
Non-Flammables That Could Contribute Unusual Hazards to a Fire	May react dangerously with hydrocarbons (fuels), organic matter, other contaminants or when hot, molten and confined, to form a mass explosive of Division 1.1. In this condition it should be treated as an explosive and the explosive public safety evacuation distances apply!
Properties That May Initiate or Contribute to Fire Intensity	OXIDISING SOLID: Will not burn but will increase intensity of a fire. This substance will accelerate burning when involved in a fire. May ignite combustibles.
Reactions That Release Gases or Vapours	Fire may produce irritating and/or toxic gases. When exposed to fierce heat, toxic oxides of nitrogen (brown fumes) are given off.
Release of Invisible Flammable Vapours and Gases	No information available.

10. STABILITY AND REACTIVITY

General Information	Contact with acids liberates toxic gas. Risk of explosion if heated under confinement. When molten it may decompose violently due to shock or pressure.
Chemical Stability	Stable under recommended storage and handling conditions. May explode from heating or detonation if contaminated or confined.
Conditions to Avoid	Avoid generating dust. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Do not contaminate material.
Materials to Avoid	Incompatible/reactive with tetranitromethane, dichloroisocyanuric acid, trichloroisocyanuric acid, bromates, chlorates, chlorites, hypochlorites, perchlorates, chloroisocyanurates, nitrites, powdered metals, strong acids, reducing agents, permanganates, combustible/organic materials, brass, bronze, copper, zinc.
Hazardous Decomposition Products	Fire may produce irritating and/or toxic gases. When exposed to fierce heat, toxic oxides of nitrogen (brown fumes) are given off. *Contamination with chlorine bleaches, pool chlorine, hypochlorites may result in the formation of explosive nitrogen trichloride.
Hazardous Polymerisation	Hazardous polymerisation will not occur.

11. TOXICOLOGICAL INFORMATION

General Information	- Acute toxicity: May be harmful if swallowed. May cause gastrointestinal irritation, with nausea, vomiting and diarrhoea. This product contains nitrates, which may be reduced to nitrites by intestinal bacteria. Nitrites may affect the blood (methaemoglobinaemia) and blood vessels (vasodilation and a fall in blood pressure). Nitrates can be absorbed through cut, burnt or broken skin. DECOMPOSITION PRODUCT: Nitrogen dioxide is "Fatal if inhaled"; Inhalation of the gas may result in chest discomfort, shortness of breath and possible pulmonary oedema, the onset of which may be delayed. - Skin corrosion/irritation: Prolonged contact may cause irritation, redness and itching. - Eye damage/irritation: Causes serious eye irritation. - Respiratory/skin sensitisation: All inorganic nitrate substances show no skin sensitisation [ECHA]. - Germ cell mutagenicity: Ammonium nitrate is not considered genotoxic. - Carcinogenicity: Nitrate or nitrite, (ingested) under conditions that result in endogenous nitrosation, is classified by the IARC Monographs as "Probably carcinogenic to humans" (Group 2A). - Reproductive toxicity: No reproductive or developmental effects observed [read-across: Potassium nitrate]. - STOT (single exposure): High concentration of airborne material may cause irritation to the nose and upper respiratory tract; symptoms may include coughing and sore throat. Absorption of Ammonium nitrate by inhalation, ingestion or through burnt or broken skin may cause dilation of blood vessels and methaemoglobinaemia; May cause dizziness, drowsiness, nausea and headache due to central nervous system effects. - STOT (repeated exposure): Prolonged or repeated exposure may cause skin dryness or cracking; may lead to dermatitis. - Aspiration toxicity: No information available.

Acute

Ingestion	Acute toxicity (Oral): - LD50, Rat (male/female): 2,950 mg/kg bw. [ECHA].
Carcinogen Category	None

12. ECOLOGICAL INFORMATION

Ecotoxicity	Aquatic toxicity: - All nitrates show a low or negligible toxicity to fish [ECHA]. - All nitrates show a low or negligible toxicity to aquatic invertebrates [ECHA]. - All nitrates show a low or negligible toxicity to algae [ECHA].
Persistence/Degradability	In aqueous solution, ammonium nitrate is completely dissociated into the ammonium ion (NH_4^+) and the nitrate anion (NO_3^-). Hydrolysis of ammonium nitrate does not occur.
Mobility	Ammonium nitrate will completely dissociate into ions in water and thus has a low potential for adsorption. Nitrate is not bound to the soil and will follow water movements.
Environmental Fate	Nitrate substances are known to play an important role in the nutrient enrichment of surface waters, commonly called eutrophication; characterised by elevated nutrient concentrations, which stimulate the growth of certain algal species, favoring simple algae and plankton growths. The oxygen concentration in water will generally decrease, leading to a negative effect on the biodiversity of the ecosystem.
Bioaccumulation Potential	Low potential for bioaccumulation.
Environmental Impact	No Data Available

13. DISPOSAL CONSIDERATIONS

General Information	Dispose of contents/container in accordance with local/regional/national regulations. Depending on the degree and nature of contamination, may be disposed of as a fertiliser.
Special Precautions for Land Fill	As this material is classified as a Security Sensitive Ammonium Nitrate (SSAN) disposal of material needs to be appropriately documented and material accurately accounted for.

14. TRANSPORT INFORMATION

Land Transport (Australia)

ADG Code

Proper Shipping Name	AMMONIUM NITRATE, with not more than 0.2% total combustible material, including any organic substance calculated as carbon, to the exclusion of any other added substance
Class	5.1 Oxidising Substances
Subsidiary Risk(s)	No Data Available
EPG	50 Ammonium Nitrate
UN Number	1942
Hazchem	1Y
Pack Group	III
Special Provision	No Data Available

Land Transport (Malaysia)
ADR Code

Proper Shipping Name	AMMONIUM NITRATE, with not more than 0.2% total combustible material, including any organic substance calculated as carbon, to the exclusion of any other added substance
Class	5.1 Oxidising Substances
Subsidiary Risk(s)	No Data Available
EPG	50 Ammonium Nitrate
UN Number	1942
Hazchem	1Y
Pack Group	III
Special Provision	No Data Available
Comments	Tunnel Restriction code E

Land Transport (New Zealand)
NZS5433

Proper Shipping Name	AMMONIUM NITRATE, with not more than 0.2% total combustible material, including any organic substance calculated as carbon, to the exclusion of any other added substance
Class	5.1 Oxidising Substances
Subsidiary Risk(s)	No Data Available
EPG	50 Ammonium Nitrate
UN Number	1942
Hazchem	1Y
Pack Group	III
Special Provision	No Data Available

Land Transport (United States of America)
US DOT

Proper Shipping Name	AMMONIUM NITRATE, with not more than 0.2% total combustible material, including any organic substance calculated as carbon, to the exclusion of any other added substance
Class	5.1 Oxidising Substances
Subsidiary Risk(s)	No Data Available
ERG	140 Oxidizers
UN Number	1942
Hazchem	1Y
Pack Group	III
Special Provision	No Data Available

Sea Transport
IMDG Code

Proper Shipping Name	AMMONIUM NITRATE, with not more than 0.2% total combustible material, including any organic substance calculated as carbon, to the exclusion of any other added substance
Class	5.1 Oxidising Substances
Subsidiary Risk(s)	No Data Available
UN Number	1942
Hazchem	1Y
Pack Group	III
Special Provision	No Data Available
EMS	F-H, S-Q

Marine Pollutant	No

Air Transport
IATA DGR

Proper Shipping Name	AMMONIUM NITRATE, with not more than 0.2% total combustible material, including any organic substance calculated as carbon, to the exclusion of any other added substance
Class	5.1 Oxidising Substances
Subsidiary Risk(s)	No Data Available
UN Number	1942
Hazchem	1Y
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	No Data Available
Poisons Schedule (Aust)	Not Scheduled

Environmental Protection Authority (New Zealand)
Hazardous Substances and New Organisms Amendment Act 2015

Approval Code	HSR001310

National/Regional Inventories

Australia (AIIC)	Listed
Canada (DSL)	Not Determined
Canada (NDSL)	Not Determined
China (IECSC)	Not Determined
Europe (EINECS)	229-347-8
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	AMNITB1000, AMNITR0015, AMNITR0017, AMNITR0019, AMNITR0500, AMNITR0501, AMNITR1000, AMNITR1001, AMNITR1002, AMNITR1003, AMNITR1004, AMNITR1005, AMNITR1006, AMNITR1007, AMNITR1008, AMNITR1009, AMNITR1010, AMNITR1011, AMNITR1012, AMNITR1013, AMNITR1014, AMNITR1015, AMNITR1016, AMNITR1017, AMNITR1018, AMNITR1019, AMNITR1020, AMNITR1021, AMNITR1022, AMNITR1023, AMNITR1024, AMNITR1025, AMNITR1026, AMNITR1027, AMNITR1028, AMNITR1029, AMNITR1030, AMNITR1100, AMNITR1200, AMNITR1300, AMNITR1350, AMNITR1400, AMNITR1500, AMNITR1600, AMNITR1700, AMNITR1800, AMNITR1805, AMNITR1810, AMNITR1811, AMNITR1812, AMNITR1900, AMNITR2000, AMNITR2001, AMNITR2002, AMNITR2100, AMNITR2200, AMNITR2300, AMNITR2400, AMNITR2500, AMNITR2700, AMNITR2800, AMNITR3000, AMNITR3001, AMNITR3100, AMNITR3500, AMNITR3600, AMNITR3700, AMNITR3800, AMNITR3900, AMNITR4000, AMNITR4500, AMNITR5000, AMNITR5500, AMNITR6000, AMNITR6500, AMNITR7000, AMNITR7300, AMNITR7400, AMNITR7500, AMNITR7600, AMNITR7700, AMNITR7800, AMNITR7900, AMNITR7901, AMNITR8000, AMNITR8100, AMNITR8200, AMNITR8300, AMNITR8301, AMNITR8302, AMNITR8400, AMNITR8401, AMNITR8500, AMNITR8501, AMNITR8502, AMNITR8700, AMNITR8800, AMNITR8900, AMNITR8901, AMNITR9000, AMNITR9001, AMNITR9503, AMNITR9504, AMNITR9514, AMNITR9600
Revision	4
Revision Date	01 Jun 2021
Reason for Issue	update sds
Key/Legend	< Less Than > Greater Than **AICS** Australian Inventory of Chemical Substances **atm** Atmosphere **CAS** Chemical Abstracts Service (Registry Number) **cm^2** 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/cm^3** 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/m^3** 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 **m^3** Cubic Metre **mbar** Millibar

mg Milligram
mg/24H Milligrams per 24 Hours
mg/kg Milligrams per Kilogram
mg/m^3 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