SAFETY DATA SHEET
POTASSIUM NITRATE
REVISION 5, DATE 06 OCT 23

1. IDENTIFICATION

Product Name	**Potassium Nitrate**
Other Names	Niter; Nitrate of potash; Saltpeter
Uses	Chemical synthesis; Oxidiser in explosives; Food preservation, preparation; Fertiliser; Pharmacology.
Chemical Family	No Data Available
Chemical Formula	KNO3
Chemical Name	Nitric acid, potassium 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 4 Serious Eye Damage/Irritation - Category 2A
Pictograms			
Signal Word			Warning
Hazard Statements		**H272**	May intensify fire; oxidizer.
		H302	Harmful if swallowed.
		H319	Causes serious eye irritation.
Precautionary Statements	Prevention	**P280**	Wear protective gloves/protective clothing/eye protection/face protection and suitable respirator.
		P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
		P220	Keep away from clothing and other combustible materials.
		P270	Do not eat, drink or smoke when using this product.
	Response	**P370 + P378**	In case of fire: Use water for extinction.
		P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
		P337 + P313	If eye irritation persists: Get medical advice.
		P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.
		P330	Rinse mouth.
	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
Potassium nitrate	KNO3	7757-79-1	>=99 - 100 %

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. 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: Remove and isolate contaminated clothing and shoes. Immediately flush skin with running water for at least 15 minutes. 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. If respiratory symptoms persist, get medical advice/attention. 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.
*Most important symptoms and effects, both acute and delayed: Harmful if swallowed. Causes eye irritation. The smooth muscle relaxant effect of nitrate salts may lead to headache, dizziness and marked hypotension. Cyanosis is clinically detectable when approximately 15% of the haemoglobin has been converted to methaemoglobin. Symptoms such as headache, dizziness, weakness and dyspnoea occur when methaemoglobin concentrations are 30% to 40%; at levels of about 60% stupor, convulsions, coma and respiratory paralysis occur. At higher levels death may result. Spectrophotometric analysis can determine the presence and concentration of methaemoglobin in the blood.
**Indication of any immediate medical attention and special treatment needed: Give 100% oxygen. In cases of ingestion, use gastric lavage. Observe blood pressure and treat hypotension if necessary. When methaemoglobin concentrations exceed 40% or when symptoms are present, give methylene blue 1 or 2 mg/kg bw. in a 1% solution by slow intravenous injection. If cyanosis has not been resolved within one hour, a second dose of 2 mg/kg bw. may be given. The total dose should not exceed 7 mg/kg bw. as unwanted effects such as dyspnoea, chest pain, vomiting, diarrhoea, mental confusion and cyanosis may occur. Without treatment methaemoglobin levels of 20-30% may revert to normal within 3 days. Bed rest is required for methaemoglobin levels in excess of 40%. Continue to monitor and give oxygen for at least two hours after treatment with methylene blue. Following inhalation of oxides of nitrogen the patient should be observed in hospital for 24 hours for delayed onset of pulmonary oedema.

Medical Conditions Aggravated by Exposure No information available.

5. FIRE FIGHTING MEASURES

General Measures Move containers from fire area if you can do it without risk. Do not move cargo or vehicle if cargo has been exposed to heat! Cool containers with water spray until well after fire is out.
*Large fire: Fight fire from maximum distance or use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

Flammability Conditions OXIDISING SOLID: Non-combustible; however, will accelerate burning when involved in a fire.

Extinguishing Media If material is involved in a fire, use water for extinction. Do not use dry chemicals or foams. CO2 or Halon® may provide limited control.
*Large Fire: Flood fire area with water from a distance.

Fire and Explosion Hazard May decompose explosively when heated or involved in a fire. May explode from heat or contamination. May ignite combustibles.

Hazardous Products of Combustion Fire/decomposition may produce irritating, corrosive and/or toxic gases, including oxides of Nitrogen (brown fumes), Potassium oxides.

Special Fire Fighting Instructions Contain runoff from fire control or dilution water - Runoff may cause pollution. Runoff may create fire or explosion hazard!

Personal Protective Equipment	Wear positive pressure self-contained breathing apparatus (SCBA). Wear chemical protective clothing - It may provide little or no thermal protection. Structural firefighters' protective clothing will only 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	1Z

6. ACCIDENTAL RELEASE MEASURES

General Response Procedure	Ensure adequate ventilation - Ventilate closed spaces before entering. Prevent exposure to heat. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Do not contaminate - Keep combustibles away from spilled material. Avoid generating dust. Avoid breathing dust and contact with eyes, skin and clothing.
Clean Up Procedures	Carefully shovel or sweep up spilled material and place in suitable container; move containers from spill area. Use non-sparking tools. *Do not get water inside containers.
Containment	Stop leak if you can do it without risk. Prevent entry into waterways, sewers, basements 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. Runoff may create fire or explosion hazard!
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 for at least 100 metres.
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 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 and suitable respirator (see SECTION 8). OXIDISING SOLID: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources - No smoking. Do not contaminate.
Storage	Store in a cool, dry and well-ventilated place, out of direct sunlight. Keep container tightly closed. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources - No smoking. Keep away from clothing, other combustibles and incompatible materials (see SECTION 10). Avoid storage on wooden floors.
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 [Adopted 2020]: TWA = 1 ppm (1.9 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 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 determined by a risk assessment, an inhalation risk exists. Recommended: Dust mask/respirator (refer to AS/NZS 1715 & 1716). - Eye/face protection: Wear appropriate eye protection to avoid eye contact. Recommended: Safety glasses or chemical goggles. - Hand protection: Wear protective gloves. Recommended: Impervious gloves. - Skin/body protection: Wear appropriate personal protective clothing to avoid skin contact. Recommended: Long sleeved clothing, overalls, boots. Wear fire/flame resistant/retardant clothing.
Special Hazards Precaustions	No information available.
Work Hygienic Practices	Do not eat, drink or smoke when using this product. Wash hands thoroughly before breaks and immediately after handling the product. Take off contaminated clothing and wash it before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid
Appearance	Crystalline powder, prill
Odour	Odourless
Colour	White
pH	4.5 - 8.5 (5 % soln.)
Vapour Pressure	No Data Available
Relative Vapour Density	No Data Available
Boiling Point	No Data Available
Melting Point	333 - 335 °C
Freezing Point	No Data Available
Solubility	Soluble in water
Specific Gravity	2.1
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	400 °C
Density	2.1 g/cm3
Specific Heat	No Data Available
Molecular Weight	101.10 g/mol
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	No information available.
Potential for Dust Explosion	No information available.

Fast or Intensely Burning Characteristics	May decompose explosively when heated or involved in a fire.
Flame Propagation or Burning Rate of Solid Materials	No information available.
Non-Flammables That Could Contribute Unusual Hazards to a Fire	May explode from heat or contamination.
Properties That May Initiate or Contribute to Fire Intensity	OXIDISING SOLID: Non-combustible; however, will accelerate burning when involved in a fire. May ignite combustibles.
Reactions That Release Gases or Vapours	Fire/decomposition may produce irritating, corrosive and/or toxic gases, including oxides of Nitrogen (brown fumes), Potassium oxides.
Release of Invisible Flammable Vapours and Gases	No information available.

10. STABILITY AND REACTIVITY

General Information	The substance is a strong oxidant. It reacts with combustible and reducing materials.
Chemical Stability	Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
Conditions to Avoid	Avoid dust formation. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Do not contaminate.
Materials to Avoid	Incompatible/reactive with reducing agents, antimony, arsenic, zinc, zirconium and their sulphides, sodium acetate, sodium hypophosphite, trichloroethylene, combustible materials, powdered metals, strong acids.
Hazardous Decomposition Products	Fire/decomposition may produce irritating, corrosive and/or toxic gases, including oxides of Nitrogen (brown fumes), Potassium oxides.
Hazardous Polymerisation	Will not occur.

11. TOXICOLOGICAL INFORMATION

General Information

Information on toxicological effects:
- Acute toxicity: Harmful if swallowed. The normal fatal dose of potassium nitrate for an adult was determined to be between 15 and 35 g, although death has been reported after taking as little as 3.5 g [ECHA].
- Skin corrosion/irritation: Not classified. No adverse effect observed (not irritating) [read-across: ammonium nitrate; OECD 404; ECHA].
- Serious eye damage/irritation: Causes serious eye irritation.
- Respiratory/skin sensitisation: Not classified. No adverse effect observed (not sensitising) [read-across: sodium nitrate; OECD 429; ECHA].
- Germ cell mutagenicity: Not classified. No adverse effect observed (negative) [ECHA].
- Carcinogenicity: Not classified. Nitrate or nitrite (ingested) under conditions that result in endogenous nitrosation is Classified by the IARC Monographs: Probably carcinogenic to humans (Group 2A).
- Reproductive toxicity: Not classified. Effect on fertility & developmental toxicity: NOAEL (sub-chronic, oral, rat): >=1,500 mg/kg bw/day [ECHA].
- STOT (single exposure): Not classified. Targets the blood and CNS.
- STOT (repeated exposure): Not classified. NOAEL (subacute, oral, rat): >=1,500 mg/kg bw/day (highest dose tested) [OECD 422; ECHA].
- Aspiration toxicity: No information available.

Information on likely routes of exposure:
- Ingestion: Harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea. Ingestion of large quantities will cause methaemoglobinaemia with headaches, heart beat irregularities, blood pressure loss, cramps and breathing difficulties. Cyanosis will occur.
- Eye contact: Causes eye irritation, redness, pain.
- Skin contact: May cause skin irritation, redness. Nitrates can be absorbed through cut, burnt or broken skin.
- Inhalation: May cause irritation, cough, sore throat.

Chronic effects: May cause anaemia, methemoglobinemia, and nephritis on prolonged exposure.

Acute

Ingestion Acute toxicity (Oral):
- LD50, Rat: 3,750 mg/kg [Nippon Yakurigaku Zasshi. Japanese Journal of Pharmacology, 81(469), 1983].
- LD50, Rabbit: 1,901 mg/kg [Southwestern Veterinarian, 27(246), 1974].

Carcinogen Category None

12. ECOLOGICAL INFORMATION

Ecotoxicity Aquatic toxicity:
- LC50, Poecilia reticulata (Guppy): 191 mg/l (96 h) [ECOTOX Database].
- EC50, Daphnia magna (Water flea): 490 mg/l (48 h) [IUCLID].

Persistence/Degradability In aqueous solution, the substance is dissociated into potassium and nitrate ions. Under anoxic conditions, denitrification occurs and nitrate is ultimately converted into molecular nitrogen as part of the Nitrogen cycle.

Mobility No information available.

Environmental Fate Prevent entry into drains and waterways.

Bioaccumulation Potential Low bioaccumulation potential.

Environmental Impact No Data Available

13. DISPOSAL CONSIDERATIONS

General Information Generation of waste should be avoided or minimised wherever possible. Dispose of surplus, non-recyclable product and any by-products via a specialist disposal company and in accordance with local/regional/national regulations. Depending on the degree and nature of contamination, dispose of as fertiliser, as a raw material or in an authorised waste facility. Incineration or landfill should only be considered when recycling is not feasible.

Special Precautions for Land Fill Contaminated packaging: Empty containers or liners may contain product residues. Handle uncleaned containers like the product itself. Packages should be emptied and can be recycled after thorough cleansing.

14. TRANSPORT INFORMATION

Land Transport (Australia)

ADG Code

Proper Shipping Name	POTASSIUM NITRATE
Class	5.1 Oxidising Substances
Subsidiary Risk(s)	No Data Available
EPG	31 Oxidizing Substances
UN Number	1486
Hazchem	1Z
Pack Group	III
Special Provision	No Data Available

Land Transport (Malaysia)

ADR Code

Proper Shipping Name	POTASSIUM NITRATE
Class	5.1 Oxidising Substances
Subsidiary Risk(s)	No Data Available
EPG	31 Oxidizing Substances
UN Number	1486
Hazchem	1Z
Pack Group	III
Special Provision	No Data Available

Land Transport (New Zealand)
NZS5433

Proper Shipping Name	POTASSIUM NITRATE
Class	5.1 Oxidising Substances
Subsidiary Risk(s)	No Data Available
EPG	31 Oxidizing Substances
UN Number	1486
Hazchem	1Z
Pack Group	III
Special Provision	No Data Available

Land Transport (United States of America)
US DOT

Proper Shipping Name	POTASSIUM NITRATE
Class	5.1 Oxidising Substances
Subsidiary Risk(s)	No Data Available
ERG	140 Oxidizers
UN Number	1486
Hazchem	1Z
Pack Group	III
Special Provision	No Data Available

Sea Transport
IMDG Code

Proper Shipping Name	POTASSIUM NITRATE
Class	5.1 Oxidising Substances
Subsidiary Risk(s)	No Data Available
UN Number	1486
Hazchem	1Z
Pack Group	III
Special Provision	No Data Available
EMS	F-A, S-Q
Marine Pollutant	No

Air Transport
IATA DGR

Proper Shipping Name	POTASSIUM NITRATE
Class	5.1 Oxidising Substances
Subsidiary Risk(s)	No Data Available

UN Number	1486
Hazchem	1Z
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	HSR001338

National/Regional Inventories

Australia (AIIC)	Listed
Canada (DSL)	Not Determined
Canada (NDSL)	Not Determined
China (IECSC)	Not Determined
Europe (EINECS)	231-818-8
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)	Listed

16. OTHER INFORMATION

Related Product Codes

PONITR0200, PONITR1000, PONITR1001, PONITR1002, PONITR1003, PONITR1004, PONITR1005, PONITR1006, PONITR1007, PONITR1008, PONITR1009, PONITR1010, PONITR1011, PONITR1012, PONITR1013, PONITR1014, PONITR1015, PONITR1017, PONITR1022, PONITR1030, PONITR1040, PONITR1045, PONITR1066, PONITR1100, PONITR1111, PONITR1112, PONITR1113, PONITR1114, PONITR1115, PONITR1116, PONITR1117, PONITR1118, PONITR1119, PONITR1120, PONITR1121, PONITR1200, PONITR1205, PONITR1206, PONITR1207, PONITR1208, PONITR1215, PONITR1216, PONITR1217, PONITR1218, PONITR1220, PONITR1221, PONITR1224, PONITR1225, PONITR1226, PONITR1227, PONITR1300, PONITR1400, PONITR1500, PONITR1600, PONITR1700, PONITR1799, PONITR1800, PONITR1801, PONITR1802, PONITR1803, PONITR1804, PONITR1805, PONITR1806, PONITR1807, PONITR1808, PONITR1809, PONITR1810, PONITR1811, PONITR1812, PONITR1813, PONITR1814, PONITR1815, PONITR1816, PONITR1817, PONITR1818, PONITR1819, PONITR1820, PONITR1821, PONITR1822, PONITR1823, PONITR1824, PONITR1825, PONITR1900, PONITR2000, PONITR2001, PONITR2002, PONITR2003, PONITR2004, PONITR2005, PONITR2006, PONITR2007, PONITR2100, PONITR2200, PONITR2300, PONITR2400, PONITR2500, PONITR2600, PONITR2800, PONITR2801, PONITR2900, PONITR3000, PONITR3024, PONITR3025, PONITR3031, PONITR3036, PONITR3037, PONITR3038, PONITR3200, PONITR3300, PONITR3500, PONITR3501, PONITR3502, PONITR3600, PONITR3601, PONITR3700, PONITR3800, PONITR4000, PONITR4001, PONITR4100, PONITR4200, PONITR4300, PONITR4400, PONITR4500, PONITR4600, PONITR4700, PONITR5000, PONITR5001, PONITR5200, PONITR5300, PONITR5500, PONITR5501, PONITR5600, PONITR5800, PONITR5900, PONITR6001, PONITR6100, PONITR6101, PONITR6102, PONITR6200, PONITR6300, PONITR6400, PONITR6500, PONITR6600, PONITR6601, PONITR6700, PONITR6701, PONITR6702, PONITR6800, PONITR6801, PONITR6802, PONITR6803, PONITR6804, PONITR6805, PONITR6806, PONITR6810, PONITR6811, PONITR6900, PONITR6901, PONITR7000, PONITR7001, PONITR7002, PONITR7003, PONITR7004, PONITR7005, PONITR7006, PONITR7010, PONITR7011, PONITR7012, PONITR7100, PONITR7200, PONITR7201, PONITR7202, PONITR7203, PONITR7204, PONITR7205, PONITR7206, PONITR7207, PONITR7208, PONITR7209, PONITR7210, PONITR7211, PONITR7212, PONITR7213, PONITR7214, PONITR7215, PONITR7216, PONITR7217, PONITR7300, PONITR7301, PONITR7302, PONITR7303, PONITR7304, PONITR7305, PONITR7306, PONITR7307, PONITR7308, PONITR7309, PONITR7310, PONITR7311, PONITR7400, PONITR7401, PONITR7500, PONITR7600, PONITR7700, PONITR7800, PONITR8000, PONITR8001, PONITR8200, PONITR8500, PONITR8501, PONITR8600, PONITR8800, PONITR8900, PONITR9000, PONITR9100, PONITR9101, PONITR9200, PONITR9201, PONITR9300, PONITR9500, PONITR9600, PONITR9700, PONITR9800

Revision

5

Revision Date

06 Oct 2023

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