

## 1. IDENTIFICATION

<b>Product Name</b>	<b>Lithium carbonate</b>
<b>Other Names</b>	No Data Available
<b>Uses</b>	Intermediate; Used in the production of glazes for ceramic and electrical porcelain, as a catalyst in the production of other lithium compounds, coating of arc welding electrodes, nucleonics, luminescent paints and dyes, glass ceramics and in aluminium production.
<b>Chemical Family</b>	No Data Available
<b>Chemical Formula</b>	Li <sub>2</sub> CO <sub>3</sub>
<b>Chemical Name</b>	Carbonic acid, dilithium salt
<b>Product Description</b>	No Data Available

### Contact Details of the Supplier of this Safety Data Sheet

Organisation	Location	Telephone
Redox Pty Ltd	2 Swettenham Road Minto NSW 2566 Australia	+61-2-97333000
Redox Pty 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

<b>Hazard Classification</b>	Hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)
<b>Hazard Categories</b>	Acute Toxicity (Oral) - Category 4 Skin Corrosion/Irritation - Category 2 Serious Eye Damage/Irritation - Category 2A Specific Target Organ Toxicity (Single Exposure) - Category 3 Acute Hazard To The Aquatic Environment - Category 3 Long-term Hazard To The Aquatic Environment - Category 3

**Pictograms**



**Signal Word** Warning

<b>Hazard Statements</b>	<b>H302</b>	Harmful if swallowed.
	<b>H315</b>	Causes skin irritation.
	<b>H319</b>	Causes serious eye irritation.
	<b>H335</b>	May cause respiratory irritation.
	<b>H412</b>	Harmful to aquatic life with long lasting effects.

<b>Precautionary Statements</b>	Prevention	<b>P280</b>	Wear protective gloves/eye protection/face protection.
		<b>P261</b>	Avoid breathing dusts or mists.
		<b>P273</b>	Avoid release to the environment.
		<b>P270</b>	Do not eat, drink or smoke when using this product.
		<b>P271</b>	Use only outdoors or in a well-ventilated area.
	Response	<b>P302 + P352</b>	IF ON SKIN: Wash with plenty of soap and water.
		<b>P337 + P313</b>	If eye irritation persists: Get medical advice/attention.
		<b>P312</b>	Call a POISON CENTER or doctor/physician if you feel unwell.
		<b>P330</b>	Rinse mouth.
		<b>P332 + P313</b>	If skin irritation occurs: Get medical advice/attention.
		<b>P362</b>	Take off contaminated clothing and wash before reuse.
		<b>P305 + P351 + P338</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	Storage	<b>P304 + P340</b>	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
		<b>P403 + P233</b>	Store in a well-ventilated place. Keep container tightly closed.
	Disposal	<b>P405</b>	Store locked up.
<b>P501</b>		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**

NOT 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

<b>HSNO Classifications</b>	Health Hazards	<b>6.1D</b>	Substances that are acutely toxic - Harmful
		<b>6.4A</b>	Substances that are irritating to the eye
		<b>6.8A</b>	Substances that are known or presumed human reproductive or developmental toxicants
		<b>6.9A</b>	Substances that are toxic to human target organs or systems
	Environmental Hazards	<b>9.3B</b>	Substances that are ecotoxic to terrestrial vertebrates

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Lithium carbonate	Li <sub>2</sub> CO <sub>3</sub>	554-13-2	>=99 %

### 4. FIRST AID MEASURES

#### Description of necessary measures according to routes of exposure

<b>Swallowed</b>	IF SWALLOWED: REFER FOR MEDICAL ATTENTION, WHERE POSSIBLE, WITHOUT DELAY. Urgent hospital treatment is likely to be needed. Immediately call a Poison Centre or doctor/physician for advice. Rinse mouth. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain an open airway and prevent aspiration. Wear a protective glove when inducing vomiting by mechanical means. Never give anything by mouth to an unconscious person. If medical attention is not available on the worksite or surroundings send the patient to a hospital together with a copy of the SDS.
<b>Eye</b>	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. Continue rinsing for at least 15 minutes. Seek medical attention without delay; if eye irritation persists or recurs, seek medical attention. NOTE: Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
<b>Skin</b>	IF ON SKIN (or hair): Remove contaminated clothing and shoes immediately. Flush skin and hair with running water for several minutes; Wash with plenty of soap and water. If skin irritation occurs, get medical advice/attention. Wash contaminated clothing and shoes before reuse.
<b>Inhaled</b>	IF INHALED: If fumes or combustion products are inhaled, remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a Poison Centre or doctor/physician for advice. Apply resuscitation if victim is not breathing - Do not use direct mouth-to-mouth method if victim ingested or inhaled the substance; use alternative respiratory method or proper respiratory device; Administer oxygen if breathing is difficult. Transport to hospital, or doctor, without delay.
<b>Advice to Doctor</b>	Onset of symptoms may be delayed for several hours. Qualified first-aid personnel should treat the patient following observation and employing supportive measures as indicated by the patient's condition. Ensure that attending medical personnel are aware of identity and nature of the product(s) involved, and take precautions to protect themselves.
<b>Medical Conditions Aggravated by Exposure</b>	Persons with impaired respiratory function, airway diseases and conditions such as emphysema or chronic bronchitis, may incur further disability if excessive concentrations of particulate are inhaled. The material may accentuate any pre-existing dermatitis condition.

### 5. FIRE FIGHTING MEASURES

<b>General Measures</b>	Alert Fire Brigade and tell them location and nature of hazard. If safe to do so, move undamaged containers from fire area. Cool containers with water spray until well after fire is out. Use fire fighting procedures suitable for surrounding area.
<b>Flammability Conditions</b>	Non-combustible; Material does not burn.
<b>Extinguishing Media</b>	There is no restriction on the type of extinguisher which may be used; Use extinguishing media suitable for surrounding area.
<b>Fire and Explosion Hazard</b>	Not considered a significant fire risk, however containers may burn.

<b>Hazardous Products of Combustion</b>	Fire or heat will produce irritating, toxic and/or corrosive gases, including metal oxides.
<b>Special Fire Fighting Instructions</b>	Contain runoff from fire control or dilution water - Runoff may pollute waterways.
<b>Personal Protective Equipment</b>	Wear self-contained breathing apparatus (SCBA) in combination with normal firefighting clothing (full fire kit).
<b>Flash Point</b>	No Data Available
<b>Lower Explosion Limit</b>	No Data Available
<b>Upper Explosion Limit</b>	No Data Available
<b>Auto Ignition Temperature</b>	No Data Available
<b>Hazchem Code</b>	No Data Available

## 6. ACCIDENTAL RELEASE MEASURES

<b>General Response Procedure</b>	Clean up all spills immediately. Ensure adequate ventilation. ELIMINATE all ignition sources (no smoking, flares, sparks or flames). Do not touch or walk through spilled material. Avoid dust formation. Avoid breathing dust and contact with eyes, skin and clothing.
<b>Clean Up Procedures</b>	Collect material (sweep or vacuum up) and place it into suitable, properly labelled containers for disposal (see SECTION 13).
<b>Containment</b>	Stop leak if safe to do so – Prevent entry into waterways, drains or confined areas. Prevent dust cloud.
<b>Decontamination</b>	Clean contaminated surface thoroughly. Do not flush into surface water or sanitary sewer system.
<b>Environmental Precautionary Measures</b>	Prevent entry into drains and waterways.
<b>Evacuation Criteria</b>	Spill or leak area should be isolated immediately. Keep unauthorised personnel away. Large spill: Alert Emergency Services and tell them location and nature of hazard.
<b>Personal Precautionary Measures</b>	Use personal protective equipment as required (see SECTION 8).

## 7. HANDLING AND STORAGE

<b>Handling</b>	Safety showers and eyewash facilities should be provided within the immediate work area for emergency use. Ensure adequate ventilation - Use only outdoors or in a well-ventilated area. Handle in accordance with good industrial hygiene and safety practice. Try to avoid creating dusty conditions. Avoid all personal contact, including inhalation. Use personal protective equipment as required (see SECTION 8). Prevent concentration in hollows and sumps.
<b>Storage</b>	Store in a cool, dry and well-ventilated place, protected from environmental extremes. Keep containers securely sealed - Check all containers are clearly labelled and free from leaks. Store away from foodstuff containers and incompatible materials (see SECTION 10). Store locked up.
<b>Container</b>	Store in original (polyethylene or polypropylene) containers. Do NOT use aluminium or galvanised containers.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>General</b>	No value assigned for this specific material by Safe Work Australia. - Emergency Limits (Lithium carbonate): TEEL-1: 0.44 mg/m <sup>3</sup> TEEL-2: 4.8 mg/m <sup>3</sup> TEEL-3: 100 mg/m <sup>3</sup>
<b>Exposure Limits</b>	No Data Available
<b>Biological Limits</b>	No information available.
<b>Engineering Measures</b>	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.
<b>Personal Protection Equipment</b>	- Respiratory protection: Respirators may be necessary when engineering and administrative controls do not adequately prevent exposures. Recommended: Particulate (refer to AS/NZS 1715 & 1716 or national equivalent). Use

approved positive flow mask if significant quantities of dust becomes airborne.

- Eye/face protection: Wear appropriate eye protection to avoid eye contact. Recommended: Safety glasses with side shields; Chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants.

- Hand protection: Wear protective gloves. Recommended: Polychloroprene, nitrile rubber, butyl rubber (suitable as glove materials for protection against undissolved, dry solids, where abrasive particles are not present).

- Skin/body protection: Wear appropriate personal protective clothing to avoid skin contact. Recommended: Overalls; PVC apron; Barrier cream.

#### Special Hazards Precautions

If prior damage to the circulatory or nervous systems has occurred or if kidney damage has been sustained, proper screenings should be conducted on individuals who may be exposed to further risk if handling and use of the material result in excessive exposures.

#### Work Hygienic Practices

Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Remove contaminated clothing and shoes immediately and wash before reuse.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State</b>	Solid
<b>Appearance</b>	Fluffy powder
<b>Odour</b>	Odourless
<b>Colour</b>	White
<b>pH</b>	11.4 1% soln.
<b>Vapour Pressure</b>	Negligible (@ No Data Available)
<b>Relative Vapour Density</b>	No Data Available
<b>Boiling Point</b>	1,310 °C (Decomposes)
<b>Melting Point</b>	723 °C
<b>Freezing Point</b>	No Data Available
<b>Solubility</b>	Partly miscible with water - Insoluble in alcohol; Soluble in dilute acids
<b>Specific Gravity</b>	2.11 (Water = 1)
<b>Flash Point</b>	No Data Available
<b>Auto Ignition Temp</b>	No Data Available
<b>Evaporation Rate</b>	No Data Available
<b>Bulk Density</b>	No Data Available
<b>Corrosion Rate</b>	No Data Available
<b>Decomposition Temperature</b>	1,300 °C
<b>Density</b>	No Data Available
<b>Specific Heat</b>	No Data Available
<b>Molecular Weight</b>	73.89 g/mol
<b>Net Propellant Weight</b>	No Data Available
<b>Octanol Water Coefficient</b>	No Data Available
<b>Particle Size</b>	No Data Available
<b>Partition Coefficient</b>	No Data Available
<b>Saturated Vapour Concentration</b>	No Data Available
<b>Vapour Temperature</b>	No Data Available
<b>Viscosity</b>	No Data Available
<b>Volatile Percent</b>	Nil @ 38 °C
<b>VOC Volume</b>	No Data Available
<b>Additional Characteristics</b>	Solubility in water: 1.54 % @ 5 °C; 0.72 % @ 100 °C
<b>Potential for Dust Explosion</b>	No information available.
<b>Fast or Intensely Burning Characteristics</b>	No information available.
<b>Flame Propagation or Burning Rate of Solid Materials</b>	No information available.

<b>Non-Flammables That Could Contribute Unusual Hazards to a Fire</b>	No information available.
<b>Properties That May Initiate or Contribute to Fire Intensity</b>	Non-combustible; Material does not burn. Contact with incompatible materials is often violent and may produce ignition.
<b>Reactions That Release Gases or Vapours</b>	Fire or heat will produce irritating, toxic and/or corrosive gases, including metal oxides.
<b>Release of Invisible Flammable Vapours and Gases</b>	No information available.

## 10. STABILITY AND REACTIVITY

<b>General Information</b>	Derivative of very electro-positive metal; Inorganic alkaline metal derivative. Reacts violently with fluorine; may react violently with chlorine trifluoride and bromine trifluoride (hypergolic oxidisers).
<b>Chemical Stability</b>	Product is considered stable; Unstable in the presence of incompatible materials.
<b>Conditions to Avoid</b>	Avoid creating dusty conditions.
<b>Materials to Avoid</b>	Incompatible/reactive with strong acids, acid chlorides, acid anhydrides and chloroformates. Segregate from fluorine, aluminium and zinc.
<b>Hazardous Decomposition Products</b>	Fire or heat will produce irritating, toxic and/or corrosive gases, including metal oxides.
<b>Hazardous Polymerisation</b>	Will not occur.

## 11. TOXICOLOGICAL INFORMATION

<b>General Information</b>	<ul style="list-style-type: none"> <li>- Acute toxicity: Harmful if swallowed; animal experiments indicate that ingestion of less than 150 grams may be fatal or may produce serious damage to health.</li> <li>Ingestion may cause irritation, abdominal pain, vomiting; Lithium, in large doses, can cause dizziness and weakness; kidney damage can result.</li> <li>- Skin corrosion/irritation: Causes skin irritation; May cause inflammation of the skin; systemic effects may result following absorption - Open cuts, abraded or irritated skin should not be exposed to this material.</li> <li>- Eye damage/irritation: Causes serious eye irritation.</li> <li>- Respiratory/skin sensitisation: Not likely to be a skin sensitiser.</li> <li>- Germ cell mutagenicity: Considered not to have mutagenic or genotoxic potential.</li> <li>- Carcinogenicity: No information available.</li> <li>- Reproductive toxicity: Not likely to have specific reproductive or developmental toxicity.</li> <li>- STOT (single exposure): May cause respiratory irritation; Symptoms of acute exposure may include coughing, laryngitis, shortness of breath, neuromuscular changes, inflammation of the larynx, chemical pneumonitis and pulmonary oedema.</li> <li>- STOT (repeated exposure): Long-term exposure to respiratory irritants may result in airways disease and may cause changes in lung function (pneumoconiosis). Substance accumulation, in the human body, may occur. Lithium compounds can affect the nervous system and muscle. Chronic exposure may result in central nervous system changes (blackout spells, epileptic seizures, coma), cardiovascular changes (cardiac arrhythmia, hypertension and circulatory collapse) and irreversible renal damage.</li> <li>- Aspiration toxicity: No information available.</li> </ul>
<b>Acute</b>	
<b>Ingestion</b>	Acute toxicity (Oral): - LD50, Rat: 525 mg/kg
<b>Inhalation</b>	Acute toxicity (Inhalation): - LC50, Rat: >0.0008 mg/L (4 h)
<b>Other</b>	Acute toxicity (Dermal): - LD50, Rat: >2,000 mg/kg
<b>Carcinogen Category</b>	None

## 12. ECOLOGICAL INFORMATION

<b>Ecotoxicity</b>	Aquatic toxicity: - LC50, Fish: 5.69 mg/L (96 h) [ECHA Registered substances - Ecotoxicological information]. - EC50, Crustacea: 6.24 mg/L (48 h) [ECHA Registered substances - Ecotoxicological information]. - NOEC, Fish: 2.87 mg/L (816 hr) [ECHA Registered substances - Ecotoxicological information].
<b>Persistence/Degradability</b>	Low persistence in water/soil; Low persistence in air.
<b>Mobility</b>	High mobility in soil (KOC = 1).
<b>Environmental Fate</b>	Harmful to aquatic life with long lasting effects - Avoid release to the environment; Prevent entry into drains and waterways.
<b>Bioaccumulation Potential</b>	Low bioaccumulative potential (LogKOW = -0.4605).
<b>Environmental Impact</b>	No Data Available

### 13. DISPOSAL CONSIDERATIONS

<b>General Information</b>	This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. Recycle wherever possible or dispose of in an authorised landfill and in accordance with local/regional/national regulations. Do NOT allow wash water from cleaning or process equipment to enter drains; It may be necessary to collect all wash water for treatment before disposal.
<b>Special Precautions for Land Fill</b>	Contaminated packaging: Containers may still present a chemical hazard/danger when empty. If container can not be cleaned sufficiently well to ensure that residuals do not remain, or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill. Where possible, retain label warnings and SDS and observe all notices pertaining to the product.

### 14. TRANSPORT INFORMATION

#### Land Transport (Australia)

ADG Code

<b>Proper Shipping Name</b>	Lithium carbonate
<b>Class</b>	No Data Available
<b>Subsidiary Risk(s)</b>	No Data Available
	No Data Available
<b>UN Number</b>	No Data Available
<b>Hazchem</b>	No Data Available
<b>Pack Group</b>	No Data Available
<b>Special Provision</b>	No Data Available

#### Land Transport (Malaysia)

ADR Code

<b>Proper Shipping Name</b>	Lithium carbonate
<b>Class</b>	No Data Available
<b>Subsidiary Risk(s)</b>	No Data Available
	No Data Available
<b>UN Number</b>	No Data Available
<b>Hazchem</b>	No Data Available
<b>Pack Group</b>	No Data Available
<b>Special Provision</b>	No Data Available

#### Land Transport (New Zealand)

NZS5433

<b>Proper Shipping Name</b>	Lithium carbonate
<b>Class</b>	No Data Available
<b>Subsidiary Risk(s)</b>	No Data Available
	No Data Available
<b>UN Number</b>	No Data Available
<b>Hazchem</b>	No Data Available
<b>Pack Group</b>	No Data Available
<b>Special Provision</b>	No Data Available

#### **Land Transport (United States of America)**

US DOT

<b>Proper Shipping Name</b>	Lithium carbonate
<b>Class</b>	No Data Available
<b>Subsidiary Risk(s)</b>	No Data Available
	No Data Available
<b>UN Number</b>	No Data Available
<b>Hazchem</b>	No Data Available
<b>Pack Group</b>	No Data Available
<b>Special Provision</b>	No Data Available

#### **Sea Transport**

IMDG Code

<b>Proper Shipping Name</b>	Lithium carbonate
<b>Class</b>	No Data Available
<b>Subsidiary Risk(s)</b>	No Data Available
<b>UN Number</b>	No Data Available
<b>Hazchem</b>	No Data Available
<b>Pack Group</b>	No Data Available
<b>Special Provision</b>	No Data Available
<b>EMS</b>	No Data Available
<b>Marine Pollutant</b>	No

#### **Air Transport**

IATA DGR

<b>Proper Shipping Name</b>	Lithium carbonate
<b>Class</b>	No Data Available
<b>Subsidiary Risk(s)</b>	No Data Available
<b>UN Number</b>	No Data Available
<b>Hazchem</b>	No Data Available
<b>Pack Group</b>	No Data Available
<b>Special Provision</b>	No Data Available

#### **National Transport Commission (Australia)**

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

<b>Dangerous Goods Classification</b>	NOT 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

<b>General Information</b>	LITHIUM for therapeutic use, is listed in SCHEDULE 4 of the SUSMP, except when included in Schedule 2.
<b>Poisons Schedule (Aust)</b>	Not Scheduled

### Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

**Approval Code** HSR006826

### National/Regional Inventories

<b>Australia (AICS)</b>	Listed
<b>Canada (DSL)</b>	Listed
<b>Canada (NDSL)</b>	Not Determined
<b>China (IECSC)</b>	Listed
<b>Europe (EINECS)</b>	209-062-5
<b>Europe (REACH)</b>	Not Determined
<b>Japan (ENCS/METI)</b>	Listed
<b>Korea (KECI)</b>	Listed
<b>Malaysia (EHS Register)</b>	Not Determined
<b>New Zealand (NZIoC)</b>	Listed
<b>Philippines (PICCS)</b>	Listed
<b>Switzerland (Giftliste 1)</b>	Not Determined
<b>Switzerland (Inventory of Notified Substances)</b>	Not Determined
<b>Taiwan (NCSR)</b>	Not Determined
<b>USA (TSCA)</b>	Listed

## 16. OTHER INFORMATION

<b>Related Product Codes</b>	LICARB0900, LICARB1000, LICARB1001, LICARB1002, LICARB1003, LICARB1004, LICARB1005, LICARB1006, LICARB1007, LICARB1008, LICARB2000, LICARB2001, LICARB2002, LICARB2003, LICARB3000, LICARB4000, LICARB4001, LICARB4002, LICARB4003, LICARB5000, LICARB5100, LICARB5101, LICARB5102, LICARB5103, LICARB5104, LICARB5105, LICARB5106, LICARB5107, LICARB5108, LICARB5109, LICARB5110, LICARB5111, LICARB5112, LICARB5113, LICARB6000, LICARB7000, LICARB7100, LICARB7101, LICARB7200, LICARB7201, LICARB7300, LICARB7301, LICARB7302, LICARB7500, LICARB7600, LICARB8000, LICARB9000, LICARB9001, LICARB9500
<b>Revision</b>	5
<b>Revision Date</b>	27 Jun 2017
<b>Reason for Issue</b>	Update
<b>Key/Legend</b>	< Less Than > Greater Than <b>AICS</b> Australian Inventory of Chemical Substances

**atm** Atmosphere  
**CAS** Chemical Abstracts Service (Registry Number)  
**cm<sup>2</sup>** Square Centimetres  
**CO<sub>2</sub>** 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<sup>3</sup>** 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  
**inH<sub>2</sub>O** Inch of Water  
**K** Kelvin  
**kg** Kilogram  
**kg/m<sup>3</sup>** Kilograms per Cubic Metre  
**lb** Pound  
**LC<sub>50</sub>** LC stands for lethal concentration. LC<sub>50</sub> 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.  
**LD<sub>50</sub>** LD stands for Lethal Dose. LD<sub>50</sub> 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<sup>3</sup>** Cubic Metre  
**mbar** Millibar  
**mg** Milligram  
**mg/24H** Milligrams per 24 Hours  
**mg/kg** Milligrams per Kilogram  
**mg/m<sup>3</sup>** Milligrams per Cubic Metre  
**Misc** or **Miscible** Liquids form one homogeneous liquid phase regardless of the amount of either component present.  
**mm** Millimetre  
**mmH<sub>2</sub>O** 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