SAFETY DATA SHEET
ISOPAR E
REVISION 3, DATE 01 DEC 20

1. IDENTIFICATION

Product Name	**ISOPAR E**
Other Names	Alkanes, C7-10-iso- [CAS#90622-56-3]
Uses	Solvent.
Chemical Family	No Data Available
Chemical Formula	Unspecified
Chemical Name	Naphtha (petroleum), light alkylate
Product Description	Isoparaffinic Hydrocarbon.

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)	Schedule 5

Globally Harmonised System

Hazard Classification

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

Hazard Categories

Flammable Liquids - Category 2

Skin Corrosion/Irritation - Category 2

Specific Target Organ Toxicity (Single Exposure) - Category 3

Aspiration Hazard - Category 1

Acute Hazard To The Aquatic Environment - Category 2

Long-term Hazard To The Aquatic Environment - Category 2

Pictograms

Signal Word

Danger

Hazard Statements

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

Precautionary Statements

Prevention	**P210**	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P280	Wear protective gloves/eye protection/face protection.
	P261	Avoid breathing fumes/mists/vapours/spray.
	P273	Avoid release to the environment.
	P240	Ground and bond container and receiving equipment.
	P241	Use explosion-proof electrical/ventilating/lighting and all other equipment.
	P242	Use non-sparking tools.
	P243	Take action to prevent static discharges.
	P235	Keep cool.
	P271	Use only outdoors or in a well-ventilated area.
Response	**P370 + P378**	In case of fire: Use carbon dioxide (CO2), dry chemical, foam or water fog for extinction.
	P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor.
	P331	Do NOT induce vomiting.
	P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
	P312	Call a POISON CENTER or doctor if you feel unwell.
	P391	Collect spillage.
	P332 + P313	If skin irritation occurs: Get medical advice.
	P363	Wash contaminated clothing before reuse.
	P304 + P340	IF INHALED: Remove victim to fresh air and keep comfortable for breathing.
Storage	**P403 + P233**	Store in a well-ventilated place. Keep container tightly closed.
	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)

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Naphtha (petroleum), light alkylate	Unspecified	64741-66-8	100 %
Contains: Octane	C8H18	111-65-9	60 - <70 %

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

Swallowed	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a Poison Centre or doctor/physician for advice. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain an open airway and prevent aspiration. Never give anything by mouth to an unconscious person. Get immediate medical assistance!
Eye	IF IN EYES: Immediately flush eyes with running water for several minutes, holding eyelids open and occasionally lifting the upper and lower lids. Remove contact lenses if present and easy to do. Continue rinsing for at least 15 minutes. If eye irritation persists, get medical advice/attention.
Skin	IF ON SKIN (or hair): Immediately flush skin and hair with running water for at least 15 minutes while removing contaminated clothing and shoes. Wash skin with soap and water. If skin irritation occurs, get medical advice/attention. Wash contaminated clothing and shoes before reuse. *In case of burns, immediately cool affected skin for as long as possible with cold water. Do not remove clothing if adhering to skin.
Inhaled	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a Poison Centre or doctor/physician for 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. Get immediate medical assistance!
Advice to Doctor	If ingested, material may be aspirated into the lungs and cause chemical pneumonitis. Treat appropriately. 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	Exposure to this material, or one of its components, in situations where there is the potential for high levels, such as in confined spaces or with abuse, may result in abnormal heart rhythm (arrhythmia). High-level exposure to hydrocarbons (above occupational exposure limits) may initiate arrhythmia in a worker that is undergoing stress or is taking a heart-stimulating substance such as epinephrine, a nasal decongestant, or an asthma or cardiovascular drug.

5. FIRE FIGHTING MEASURES

General Measures	Evacuate area. Move containers from fire area if you can do it without risk. Use water spray to cool fire exposed surfaces and to protect personnel. *If a leak or spill has not ignited, use water spray to disperse the vapours and to protect personnel.
Flammability Conditions	HIGHLY FLAMMABLE LIQUID & VAPOUR: Will be easily ignited by heat, sparks or flames.
Extinguishing Media	Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish flames. Do not use straight streams of water. *CAUTION: This product has a very low flash point: Use of water spray when fighting fire may be inefficient.

Fire and Explosion Hazard	Risk of violent reaction or explosion! Vapours may form explosive mixtures with air. Vapours may travel to source of ignition and flash back. Vapours are heavier than air; They will spread along ground and collect in low or confined areas. Vapour explosion hazard indoors, outdoors or in sewers. Containers may explode when heated.
Hazardous Products of Combustion	Fire may produce irritating and/or toxic gases; Incomplete combustion products, oxides of carbon, smoke, fume.
Special Fire Fighting Instructions	Contain runoff from fire control or dilution water - Runoff may cause pollution. Runoff to sewer may create fire or explosion hazard!
Personal Protective Equipment	Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection.
Flash Point	6 °C [ASTM D-56]
Lower Explosion Limit	0.9 %
Upper Explosion Limit	6.0 %
Auto Ignition Temperature	380 °C
Hazchem Code	3YE

6. ACCIDENTAL RELEASE MEASURES

General Response Procedure	Ensure adequate ventilation - Ventilate closed spaces before entering. ELIMINATE all ignition sources. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material - Slip hazard! Avoid breathing vapours and contact with eyes, skin and clothing.
Clean Up Procedures	Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Use clean, non-sparking tools to collect absorbed material.
Containment	Stop leak if you can do it without risk. Prevent entry into waterways, sewers, basements or confined areas. Dike far ahead of large spill for later recovery and disposal. *A vapour-suppressing foam may be used to reduce vapours. Water spray may reduce vapour, but may not prevent ignition in closed spaces.
Decontamination	No information available.
Environmental Precautionary Measures	Spillages and decontamination runoff should be prevented from entering drains and watercourses. In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.
Evacuation Criteria	Immediately isolate spill or leak area. Keep unauthorized personnel away. Stay upwind and/or uphill. *Warn or evacuate occupants in surrounding and downwind areas if required, due to toxicity or flammability of the material.
Personal Precautionary Measures	For small spills, normal antistatic work clothes are usually adequate. For large spills, full body suit of chemical resistant, antistatic material is recommended. *For emergency responders: half-face or full-face respirator with filter(s) for organic vapour and, when applicable, H2S, or self-contained breathing apparatus (SCBA) can be used depending on the size of spill and potential level of exposure. If the exposure cannot be completely characterized or an oxygen deficient atmosphere is possible or anticipated, SCBA is recommended. Work gloves that are resistant to aromatic hydrocarbons are recommended (Note: gloves made of polyvinyl acetate (PVA) are not water-resistant and are not suitable for emergency use). Chemical goggles are recommended if splashes or contact with eyes is possible.

7. HANDLING AND STORAGE

Handling	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. Handle containers with care. Open slowly in order to control possible pressure release. Avoid breathing vapours and contact with eyes, skin and clothing. Do not ingest. Wear protective gloves/protective clothing/eye protection/face protection (see SECTION 8). HIGHLY FLAMMABLE LIQUID & VAPOUR: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources - No smoking. Material can accumulate static charges which may cause an electrical spark (ignition source). Ground and bond container and receiving equipment. Use explosion-proof equipment and non-sparking tools. Take action to prevent static discharges. Avoid release to the environment - Collect spillage (see SECTION 6).

	*Bonding and grounds may not eliminate the hazard from static accumulation. Consult local applicable standards for guidance.
Storage	Store in a cool, dry and well-ventilated place, out of direct sunlight - Outside or detached storage preferred. Keep container tightly closed. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources - No smoking. Storage containers should be earthed and bonded. Keep away from foodstuffs and incompatible materials (see SECTION 10. Store locked up. Ample fire water supply should be available; A fixed sprinkler/deluge system is recommended. *Fixed storage containers, transfer containers and associated equipment should be earthed and bonded to prevent accumulation of static charge.
Container	The type of container used to store the material may affect static accumulation and dissipation. - Suitable Containers/Packing: Tankers; Tank Trucks; Drums; Railcars. - Suitable Materials and Coatings (Chemical Compatibility): Carbon Steel; Stainless Steel; Polyester; Teflon; Polyethylene; Polypropylene. - Unsuitable Materials and Coatings: Butyl Rubber; Natural Rubber; Ethylene-propylene-diene monomer (EPDM); Polystyrene.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General	No specific exposure standards are available for the product. For Naphtha (petroleum), light alkylate: - Limit/Standard (Vapour): RCP-TWA = 241 ppm (1,200 mg/m3) Total Hydrocarbons [ExxonMobil, 2010]. COMPONENT: Octane (CAS No. 111-65-9): - Safe Work Australia Exposure Standard: TWA = 300 ppm (1,400 mg/m3); STEL = 375 ppm (1,750 mg/m3). - New Zealand Workplace Exposure Standard: TWA = 300 ppm (1,400 mg/m3); STEL = 375 ppm (1,750 mg/m3).
Exposure Limits	No Data Available
Biological Limits	No biological limits allocated.
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. *Adequate ventilation should be provided so that exposure limits are not exceeded. Use explosion-proof ventilation equipment.
Personal Protection Equipment	- Respiratory protection: If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Respirator selection, use and maintenance must be in accordance with regulatory requirements (refer to AS/NZS 1715 & 1716). Recommended: Half-face filter respirator, Type A filter material. For high airborne concentrations, use an approved supplied-air respirator, operated in positive pressure mode. Supplied air respirators with an escape bottle may be appropriate when oxygen levels are inadequate, gas/vapour warning properties are poor, or if air purifying filter capacity/rating may be exceeded. - Eye/face protection: Wear appropriate eye protection to avoid eye contact. Recommended: If contact is likely, safety glasses with side shields. - Hand protection: Wear protective gloves. Recommended: Chemical resistant gloves, e.g. Nitrile. If contact with forearms is likely, wear gauntlet style gloves. - Skin/body protection: Wear appropriate personal protective clothing to avoid skin contact. Recommended: Chemical/oil resistant clothing.
Special Hazards Precaustions	This material, or a component, may be associated with cardiac sensitization following very high exposures (well above occupational exposure limits) or with concurrent exposure to high stress levels or heart-stimulating substances like epinephrine. Administration of such substances should be avoided.
Work Hygienic Practices	Do not eat, drink or smoke when using this product. Always wash hands after handling the material and before eating, drinking and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Appearance	Clear liquid

Odour	Sweet
Colour	Colourless
pH	No Data Available
Vapour Pressure	2 kPa (15 mmHg) [Calculated] (@ 20 °C)
Relative Vapour Density	4.1 Air = 1
Boiling Point	115 - 140 °C [ASTM D86]
Melting Point	-105 °C (Pour point) [ASTM D5950]
Freezing Point	No Data Available
Solubility	Negligible solubility in water
Specific Gravity	0.72 (with respect to water) [Calculated]
Flash Point	6 °C [ASTM D-56]
Auto Ignition Temp	380 °C
Evaporation Rate	2 (n-butyl acetate = 1)
Bulk Density	No Data Available
Corrosion Rate	No Data Available
Decomposition Temperature	No Data Available
Density	720 kg/m3 [ASTM D4052]
Specific Heat	No Data Available
Molecular Weight	119 g/mol [Calculated]
Net Propellant Weight	No Data Available
Octanol Water Coefficient	Log Pow >4 [Estimated]
Particle Size	No Data Available
Partition Coefficient	No Data Available
Saturated Vapour Concentration	No Data Available
Vapour Temperature	(@ 101 kPa)
Viscosity	0.7 cSt (@ 40 °C)
Volatile Percent	No Data Available
VOC Volume	No Data Available
Additional Characteristics	This material is a static accumulator. A liquid is typically considered a nonconductive, static accumulator if its conductivity is below 100 pS/m (100x10E-12 Siemens per meter) and is considered a semi-conductive, static accumulator if its conductivity is below 10,000 pS/m. Whether a liquid is nonconductive or semi-conductive, the precautions are the same. A number of factors, for example liquid temperature, presence of contaminants, anti-static additives and filtration can greatly influence the conductivity of a liquid.
Potential for Dust Explosion	Not applicable.
Fast or Intensely Burning Characteristics	Risk of violent reaction or explosion!
Flame Propagation or Burning Rate of Solid Materials	No information available.
Non-Flammables That Could Contribute Unusual Hazards to a Fire	CAUTION: This product has a very low flash point: Use of water spray when fighting fire may be inefficient.
Properties That May Initiate or Contribute to Fire Intensity	HIGHLY FLAMMABLE LIQUID & VAPOUR: Will be easily ignited by heat, sparks or flames.
Reactions That Release Gases or Vapours	Fire may produce irritating and/or toxic gases; Incomplete combustion products, oxides of carbon, smoke, fume.
Release of Invisible Flammable Vapours and Gases	Material can release vapours that readily form flammable mixtures. Vapour accumulation could flash and/or explode if ignited.

10. STABILITY AND REACTIVITY

General Information	Potentially toxic/irritating fumes/vapour may be evolved from heated or agitated material.
Chemical Stability	Material is stable under normal conditions.
Conditions to Avoid	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
Materials to Avoid	Incompatible with strong oxidisers.
Hazardous Decomposition Products	Material does not decompose at ambient temperatures. Fire may produce irritating and/or toxic gases; Incomplete combustion products, oxides of carbon, smoke, fume.
Hazardous Polymerisation	Hazardous polymerisation will not occur.

11. TOXICOLOGICAL INFORMATION

General Information

- Acute toxicity: Minimally Toxic (Based on test data for the material). If ingested, material may be aspirated into the lungs and cause chemical pneumonitis.
- Skin corrosion/irritation: Causes skin irritation. Moderately irritating to skin with prolonged exposure (Based on test data for the material).
- Eye damage/irritation: May cause mild, short-lasting discomfort to eyes (Based on test data for the material).
- Respiratory/skin sensitisation: Not expected to be a respiratory sensitizer. Not expected to be a skin sensitizer (Based on test data for structurally similar materials).
- Germ cell mutagenicity: Not expected to be a germ cell mutagen (Based on test data for the material).
- Carcinogenicity: Not expected to cause cancer.
- Reproductive toxicity: Not expected to be a reproductive toxicant (Based on test data for structurally similar materials). Not expected to cause harm to breast-fed children.
- STOT (single exposure): May cause drowsiness or dizziness. Vapour concentrations above recommended exposure levels are irritating to the eyes and the respiratory tract, may cause headaches and dizziness, are anaesthetic and may have other central nervous system effects.
- STOT (repeated exposure): Not expected to cause organ damage from prolonged or repeated exposure (Based on test data for the material).
- Aspiration toxicity: May be fatal if swallowed and enters airways (Based on physicochemical properties of the material). Small amounts of liquid aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema.

Acute

Ingestion	Acute toxicity (Oral): - LD50, Rat: >5,000 mg/kg [Test(s) equivalent or similar to OECD Guideline 401].
Other	Acute toxicity (Dermal): - LD50, Rabbit: >2,000 mg/kg [Test(s) equivalent or similar to OECD Guideline 402].
Inhalation	Acute toxicity (Inhalation): - LC50, Rat: >20 mg/l (4 h) (Vapour) [Test(s) equivalent or similar to OECD Guideline 401].
Carcinogen Category	None

12. ECOLOGICAL INFORMATION

Ecotoxicity	Expected to be toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.
Persistence/Degradability	Expected to be inherently biodegradable. Expected to degrade rapidly in air. *Transformation due to hydrolysis/photolysis not expected to be significant.
Mobility	Highly volatile, will partition rapidly to air. Not expected to partition to sediment and wastewater solids.
Environmental Fate	Comply with applicable environmental regulations limiting discharge to air, water and soil. Protect the environment by applying appropriate control measures to prevent or limit emissions.
Bioaccumulation Potential	No information available.
Environmental Impact	No Data Available

13. DISPOSAL CONSIDERATIONS

General Information	Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal. Product is suitable for burning in an enclosed controlled burner for fuel value or disposal by supervised incineration at very high temperatures to prevent formation of undesirable combustion products.
Special Precautions for Land Fill	Empty Container Warning: Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. *Do NOT pressurise, cut, weld, braze, solder, drill, grind or expose such containers to heat, flame, sparks, static electricity or other sources of ignition. They may explode and cause injury or death!

14. TRANSPORT INFORMATION

Land Transport (Australia)
ADG Code

Proper Shipping Name	HYDROCARBONS, LIQUID, N.O.S. (Octane and isomers)
Class	3 Flammable Liquids
Subsidiary Risk(s)	No Data Available
EPG	14 Liquids - Highly Flammable
UN Number	3295
Hazchem	3YE
Pack Group	II
Special Provision	No Data Available

Land Transport (Malaysia)
ADR Code

Proper Shipping Name	HYDROCARBONS, LIQUID, N.O.S. (Octane and isomers)
Class	3 Flammable Liquids
Subsidiary Risk(s)	No Data Available
EPG	14 Liquids - Highly Flammable
UN Number	3295
Hazchem	3YE
Pack Group	II
Special Provision	No Data Available

Land Transport (New Zealand)
NZS5433

Proper Shipping Name	HYDROCARBONS, LIQUID, N.O.S. (Octane and isomers)
Class	3 Flammable Liquids
Subsidiary Risk(s)	No Data Available
EPG	14 Liquids - Highly Flammable
UN Number	3295
Hazchem	3YE
Pack Group	II

Special Provision	No Data Available

Land Transport (United States of America)
US DOT

Proper Shipping Name	HYDROCARBONS, LIQUID, N.O.S. (Octane and isomers)
Class	3 Flammable Liquids
Subsidiary Risk(s)	No Data Available
ERG	128 Flammable Liquids (Non-Polar / Water-Immiscible)
UN Number	3295
Hazchem	3YE
Pack Group	II
Special Provision	No Data Available

Sea Transport
IMDG Code

Proper Shipping Name	HYDROCARBONS, LIQUID, N.O.S. (Octane and isomers)
Class	3 Flammable Liquids
Subsidiary Risk(s)	No Data Available
UN Number	3295
Hazchem	3YE
Pack Group	II
Special Provision	No Data Available
EMS	F-E, S-D
Marine Pollutant	Yes

Air Transport
IATA DGR

Proper Shipping Name	HYDROCARBONS, LIQUID, N.O.S. (Octane and isomers)
Class	3 Flammable Liquids
Subsidiary Risk(s)	No Data Available
UN Number	3295
Hazchem	3YE
Pack Group	II
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	HYDROCARBONS, LIQUID
Poisons Schedule (Aust)	Schedule 5

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

Approval Code	Solvents Flammable Group Standard 2020 HSR002650

National/Regional Inventories

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

16. OTHER INFORMATION

Related Product Codes	ISOPAR2100, ISOPAR2101, ISOPAR2150, ISOPAR2160, ISOPAR2410
Revision	3
Revision Date	01 Dec 2020
Reason for Issue	Updated 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