

1. IDENTIFICATION

Product Name	Hydrogen peroxide, >60%
Other Names	No Data Available
Uses	Used as an oxidant in bleaching paper pulp, cotton, cotton/synthetic blends and wool fabrics. Used in wastewater and sewage treatment plants to reduce sulphide corrosion and odours and to supply supplemental dissolved oxygen.
Chemical Family	No Data Available
Chemical Formula	H ₂ O ₂
Chemical Name	Hydrogen peroxide, >60% aqueous solution, stabilised
Product Description	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) Schedule 6

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 Liquids - Category 1 Acute Toxicity (Oral) - Category 4 Skin Corrosion/Irritation - Category 1A Serious Eye Damage/Irritation - Category 1 Specific Target Organ Toxicity (Single Exposure) - Category 3

Pictograms



Signal Word Danger

Hazard Statements	H271	May cause fire or explosion; strong oxidizer.
	H302	Harmful if swallowed.
	H314	Causes severe skin burns and eye damage.
	H335	May cause respiratory irritation.

Precautionary Statements	Prevention	P210	Keep away from heat.
		P221	Take any precaution to avoid mixing with combustibles/organic material.
		P260	Do not breathe mist/vapour/spray.
		P280	Wear protective gloves/protective clothing/eye protection/face protection.
		P283	Wear fire/flammable resistant/retardant clothing.
		P270	Do not eat, drink or smoke when using this product.
		P271	Use only outdoors or in a well-ventilated area.
	Response	P371 + P380 + P375	In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.
		P370 + P378	In case of fire: Use water jets for extinction.
		P303 + P361 + P353	IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
		P310	Immediately call a POISON CENTER or doctor/physician.
		P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
		P306 + P360	IF ON CLOTHING: Rinse immediately contaminated clothing and skin with plenty of water before removing clothes.
		P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
		P363	Wash contaminated clothing before reuse.
		P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position 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)

Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

HSNO Classifications	Physical Hazards	5.1.1A	Oxidising substances that are liquids or solids: high hazard
	Health Hazards	6.1D	Substances that are acutely toxic - Harmful
		6.9B	Substances that are harmful to human target organs or systems
		8.2A	Substances that are corrosive to dermal tissue UN PGI
		8.3A	Substances that are corrosive to ocular tissue
	Environmental Hazards	9.1D	Substances that are slightly harmful to the aquatic environment or are otherwise designed for biocidal action
		9.3B	Substances that are ecotoxic to terrestrial vertebrates

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Hydrogen peroxide	H ₂ O ₂	7722-84-1	60 - 80 %
Water	H ₂ O	7732-18-5	20 - 40 %

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

Swallowed

IF SWALLOWED: Rinse mouth immediately, then give a glass of water. Do NOT induce vomiting. Immediately call a Poison Centre or doctor/physician for advice. Urgent hospital treatment is likely to be needed. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Never give anything by mouth to an unconscious person.

Eye

IF IN EYES: Immediately flush eyes with running water for several minutes, holding eyelids open and occasionally lifting the upper and lower lids. Immediately call a Poison Centre or doctor/physician for advice. Remove contact lenses if present and easy to do. Continue flushing until advised to stop by a Poisons Information Centre or a doctor, or for at least 15 minutes.

*Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

Skin

IF ON SKIN (or hair): Remove contaminated clothing and shoes immediately. Flush skin and hair with running water for at least 15 minutes. In case of gross contamination, drench contaminated clothing and skin with plenty of water before removing clothes. Immediately call a Poison Centre or doctor/physician for advice. Wash contaminated clothing and shoes before reuse.

Inhaled

IF 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 - Administer oxygen if breathing is difficult.

*Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.

Advice to Doctor

Treat symptomatically. Reaction may be delayed up to 24 hours after exposure; affected individuals need complete rest (preferably in semi-recumbent posture) and must be kept under medical observation even if no symptoms are (yet) manifested. Careful ophthalmologic evaluation is recommended and the possibility of local corticosteroid therapy should be considered. Because of the likelihood of systemic effects, attempts at evacuating the stomach via emesis induction or gastric lavage should be avoided. Depending on the degree of exposure, periodic medical examination is indicated. The symptoms of lung oedema often do not manifest until a few hours have passed and they are aggravated by physical effort. Rest and medical observation is therefore essential.

Medical Conditions Aggravated by Exposure

No information available.

5. FIRE FIGHTING MEASURES

General Measures

If safe to do so, move undamaged containers from fire area. Do not move cargo if cargo has been exposed to heat.

Cool containers with flooding quantities of water until well after fire is out - If impossible, withdraw from area and let fire burn. Avoid getting water inside containers; a violent reaction may occur. Dam fire control water for later disposal. ALWAYS stay away from tank ends.

Flammability Conditions	OXIDISING SUBSTANCE: Material itself is not combustible, but will accelerate burning when involved in a fire.
Extinguishing Media	If material is involved in a fire, use flooding quantities of water for extinction - Do not use dry chemicals, Carbon dioxide (CO ₂) or foam. Large fire: Flood fire area with water from a protected position.
Fire and Explosion Hazard	Risk of violent reaction or explosion: May explode from heating, shock, friction or contamination. May ignite combustibles. Containers may explode when heated. Runoff may create fire or explosion hazard.
Hazardous Products of Combustion	Under conditions of thermal decomposition, releases steam, oxygen.
Special Fire Fighting Instructions	Contain runoff from fire control or dilution water - Runoff may pollute waterways; Runoff may create fire or explosion hazard.
Personal Protective Equipment	Wear self-contained breathing apparatus (SCBA) and chemical splash suit. Structural firefighter's uniform will provide limited protection.
Flash Point	Does not flash
Lower Explosion Limit	No Data Available
Upper Explosion Limit	No Data Available
Auto Ignition Temperature	No Data Available
Hazchem Code	2P

6. ACCIDENTAL RELEASE MEASURES

General Response Procedure	Prevent exposure to heat. ELIMINATE all sources of ignition. Do not contaminate - Keep combustibles/incompatible materials away from spilled material. Do not breathe vapours and prevent contact with eyes, skin and clothing.
Clean Up Procedures	Use a non-combustible material like vermiculite, sand or earth to soak up the product and place in a suitable container for later disposal (see SECTION 13). Rinse away any residue with plenty of water. Do not seal defective containers or waste receptacles airtight (danger of bursting due to product decomposition). Never return spilled product into its original container for re-use (risk of decomposition).
Containment	Stop leak if safe to do so - Prevent entry into waterways, drains or confined areas. Isolate defective containers immediately. Place defective containers in contaminant free waste receptacle (waste packaging receptacle) made of plastic (not metal).
Decontamination	To handle a small quantity of spilt product, dilute with copious amounts of water to <3%; Drain to an approved chemical sewer, waste treatment system or municipal sewer. In the case of a larger spill or where there is insufficient water available for dilution, contain the spill and leave to decompose naturally until <3% is reached.
Environmental Precautionary Measures	Small spillages and decontamination run-off (<3%) may be washed to drains with large quantities of water. Due care must however still be exercised to avoid unnecessary pollution of watercourses.
Evacuation Criteria	Spill or leak area should be isolated immediately. Keep unauthorised personnel away. Keep upwind and to higher ground. Large spill: Immediately contact Police or Fire Brigade; Consider initial downwind evacuation of areas within at least 100 m.
Personal Precautionary Measures	Do not touch damaged containers or spilled material unless wearing appropriate protective clothing (see SECTION 8). Large spill: Wear SCBA and chemical splash suit. Structural firefighter's uniform will provide limited protection.

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. Do not breathe mist/vapours/aerosols and prevent contact with eyes, skin and clothing. Do not ingest. Wear protective gloves/(fire/flame resistant/retardant) protective clothing/eye protection/face protection (see SECTION 8). OXIDISING SUBSTANCE: Keep away from heat and sources of ignition - No smoking. Take any precaution to avoid mixing with combustibles/incompatible materials (see SECTION 10). Do NOT empty container by means of pressure. Never return spilled product into its original container for re-use (risk of decomposition).
Storage	Store in a cool, dry and well-ventilated place, out of direct sunlight. Keep container tightly closed. Always close container tightly after removal of product. Avoid leakage and leaving residues of the product on containers. Keep away from heat and sources of ignition - No smoking. Keep/store away from clothing/other combustible/incompatible materials (see SECTION 10). Store locked up.
Container	Only use containers which are specially permitted for hydrogen peroxide. Do NOT store in iron, mild steel, copper, bronze, brass, zinc, tin, platinum. Use adequate venting devices on all packages, containers and tanks and check

correct operation periodically. Do NOT confine product in unvented vessels or between closed valves - Risk of over-pressure and burst due to decomposition in confined spaces and pipes. Packages, containers and tanks should regularly be checked by visual observation for any sign of abnormality, e.g. corrosion, exert pressure (bulging), temperature increase, etc. Transport and store container in upright position only.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General	For Hydrogen peroxide (CAS No. 7722-84-1): - Safe Work Australia Exposure Standard: TWA = 1 ppm (1.4 mg/m ³). - New Zealand Workplace Exposure Standard: TWA = 1 ppm (1.4 mg/m ³).
Exposure Limits	No Data Available
Biological Limits	No information available.
Engineering Measures	A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.
Personal Protection Equipment	- Respiratory protection: In case of inadequate ventilation and if open handling is unavoidable, wear respiratory protection. Recommended: Respirator with A2B2E2K192 combination filter (Draeger), ABEK2P3 combination filter (3M) or OV/AG combination filter (3M); or self-contained breathing apparatus (refer to AS/NZS 1715 & 1716). - Eye/face protection: Wear appropriate eye protection to prevent eye contact. Recommended: Tight fitting chemical splash goggles and full face shield. Hard hat with brim protects the head and reduces run down of splashed peroxide into the eyes. - Hand protection: Wear protective gloves. Recommended: Gloves of synthetic rubber (neoprene, butyl rubber or vinyl). - Skin/body protection: Wear appropriate personal protective clothing to prevent skin contact. Recommended: Wear synthetic clothing. Avoid natural fibre clothing such as cotton, rayon or wool. Use full splash suit or "acid" suit of neoprene, PVC, butyl rubber or polyethylene, when appropriate, to avoid exposure to peroxide. Wear synthetic rubber boots (neoprene, butyl rubber or vinyl). Do NOT wear leather shoes or boots as they can catch fire within minutes after contact with peroxide, causing severe burns to the wearer.
Special Hazards Precautions	Prior to the first filling and operation of a tank installation, all parts of the facility, including all pipes, must be thoroughly cleaned and flushed through. Metal elements of the installation must first be pickled and passivated sufficiently. Regularly verify the availability of water to deal with emergencies (for cooling, tank flooding, fire fighting) and check correct operation periodically.
Work Hygienic Practices	Do not eat, drink or smoke when using this product. Wash face (before removing goggles) and/or hands before break and end of work. Avoid contaminating clothes with product. Immediately change moistened and saturated clothes. Immediately rinse contaminated or saturated clothing with water. Any contaminated protective equipment is to be cleaned after use. Avoid protective gloves, clothes and shoes made from textiles or leather - Possible spontaneous ignition.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Appearance	Clear liquid
Odour	Slightly pungent
Colour	Colourless
pH	<3
Vapour Pressure	175 Pa (Partial vapour pressure: H ₂ O ₂) - 1,470 Pa (Total vapour pressure: H ₂ O ₂ + H ₂ O) (@ 30 °C)
Relative Vapour Density	No Data Available
Boiling Point	125 °C
Melting Point	-40 °C
Freezing Point	No Data Available
Solubility	Completely miscible with water
Specific Gravity	No Data Available
Flash Point	Does not flash
Auto Ignition Temp	No Data Available
Evaporation Rate	No Data Available

Bulk Density	No Data Available
Corrosion Rate	No Data Available
Decomposition Temperature	No Data Available
Density	1,288 g/cm ³
Specific Heat	No Data Available
Molecular Weight	34.02 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	1.9 mPas (@ 0 °C)
Volatile Percent	No Data Available
VOC Volume	No Data Available
Additional Characteristics	No information available.
Potential for Dust Explosion	Not applicable.
Fast or Intensely Burning Characteristics	Risk of violent reaction or explosion: May explode from heating, shock, friction or contamination.
Flame Propagation or Burning Rate of Solid Materials	No information available.
Non-Flammables That Could Contribute Unusual Hazards to a Fire	No information available.
Properties That May Initiate or Contribute to Fire Intensity	OXIDISING SUBSTANCE: Material itself is not combustible, but will accelerate burning when involved in a fire. May ignite combustibles.
Reactions That Release Gases or Vapours	Under conditions of thermal decomposition, releases steam, oxygen.
Release of Invisible Flammable Vapours and Gases	No information available.

10. STABILITY AND REACTIVITY

General Information	Product is a strong oxidising agent (very reactive). Commercial products are stabilised to reduce risk of decomposition due to contamination. Danger of decomposition if exposed to heat, impurities or contamination, leading to self-accelerated, exothermic decomposition and the formation of oxygen.
Chemical Stability	Stable under recommended storage conditions.
Conditions to Avoid	Keep away from heat and sources of ignition. Take any precaution to avoid mixing with combustibles/incompatible materials.
Materials to Avoid	Incompatible/reactive with alkalis, reducing agents, decomposition catalysts, metals, metallic salts, hydrochloric acid (risk of decomposition); flammable substances (risk of fire); organic solvents (risk of explosion).
Hazardous Decomposition Products	Under conditions of thermal decomposition, releases steam, oxygen.
Hazardous Polymerisation	No information available.

11. TOXICOLOGICAL INFORMATION

General Information	<ul style="list-style-type: none"> - Acute toxicity: Harmful if swallowed. Swallowing can lead to bleeding of the mucosa in the mouth, oesophagus and stomach. The rapid releasing of oxygen can cause distension and bleeding of the mucosa in the stomach and lead to severe damage of the internal organs especially in the event of greater intake of the product. - Skin corrosion/irritation: Strong corrosive - Causes caustic burns. With increasing contact length, local erythema or extreme irritation (whitening) up to blistering (caustic burn) can occur. - Eye damage/irritation: Corrosive - Causes extreme irritation up to cauterisation. Can cause severe conjunctivitis,
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cornea damage or irreversible eye damage. Symptoms may occur with delay after any exposure.

- Respiratory/skin sensitisation: Not sensitising.
- Germ cell mutagenicity: Negative [Lit].
- Carcinogenicity: Hydrogen peroxide is not a carcinogenic substance according to MAK, IARC, NTP, OSHA, ACGIH.
- Reproductive toxicity: No information available.
- STOT (single exposure): Inhalation of vapour/aerosols can lead to irritation of the respiratory tract and cause inflammation of the respiratory tract and pulmonary oedema. Symptoms may occur with delay after any exposure.
- STOT (repeated exposure): Possible irritative effect: Gastrointestinal tract [Drinking water analysis (Mouse); OECD TG 408].
- Aspiration toxicity: No information available.

Acute

Ingestion

Acute toxicity (Oral):
- LD50, Rat: 805 mg/kg [OECD TG 401; Supplier's SDS].

Other

Acute toxicity (Dermal):
- LD50, Rabbit: >65,000 mg/kg [Supplier's SDS].

Inhalation

Acute toxicity (Inhalation):
TEST SUBSTANCE: Hydrogen peroxide, 50%:
- LCLo, Rat: 0.17 mg/l (4 h) [Supplier's SDS].
*No fatalities at the maximum dose attainable under experimental conditions.

Carcinogen Category

None

12. ECOLOGICAL INFORMATION

Ecotoxicity

No information available.

Persistence/Degradability

Photochemical degradation (air) takes place. The product can be degraded by abiotic (e.g. chemical or photolytic) processes.

Mobility

No information available.

Environmental Fate

Small spillages and decontamination run-off (<3%) may be washed to drains with large quantities of water. Due care must however still be exercised to avoid unnecessary pollution of watercourses.

Bioaccumulation Potential

None (hydrogen peroxide quickly decomposes to oxygen and water).

Environmental Impact

No Data Available

13. DISPOSAL CONSIDERATIONS

General Information

Dispose of surplus/waste product and non-recyclable solutions to a reputable disposal company and in accordance with local/regional/national regulations.

Special Precautions for Land Fill

Rinse empty containers with water before disposal. Offer rinsed packaging material to local recycling facilities. Do NOT dispose of containers that have not been emptied completely and/or cleaned of substance.

14. TRANSPORT INFORMATION

Land Transport (Australia)

ADG Code

Proper Shipping Name

HYDROGEN PEROXIDE, AQUEOUS SOLUTION, STABILISED with more than 60% hydrogen peroxide

Class

5.1 Oxidising Substances

Subsidiary Risk(s)

8 Corrosive Substances

EPG

31 Oxidizing Substances

UN Number

2015

Hazchem

2P

Pack Group I
Special Provision No Data Available

Land Transport (Malaysia)

ADR Code

Proper Shipping Name HYDROGEN PEROXIDE, AQUEOUS SOLUTION, STABILISED with more than 60% hydrogen peroxide
Class 5.1 Oxidising Substances
Subsidiary Risk(s) 8 Corrosive Substances
EPG 31 Oxidizing Substances
UN Number 2015
Hazchem 2P
Pack Group I
Special Provision No Data Available

Land Transport (New Zealand)

NZS5433

Proper Shipping Name HYDROGEN PEROXIDE, AQUEOUS SOLUTION, STABILISED with more than 60% hydrogen peroxide
Class 5.1 Oxidising Substances
Subsidiary Risk(s) 8 Corrosive Substances
EPG 31 Oxidizing Substances
UN Number 2015
Hazchem 2P
Pack Group I
Special Provision No Data Available

Land Transport (United States of America)

US DOT

Proper Shipping Name HYDROGEN PEROXIDE, AQUEOUS SOLUTION, STABILISED with more than 60% hydrogen peroxide
Class 5.1 Oxidising Substances
Subsidiary Risk(s) 8 Corrosive Substances
ERG 143 Oxidizers (Unstable)
UN Number 2015
Hazchem 2P
Pack Group I
Special Provision No Data Available

Sea Transport

IMDG Code

Proper Shipping Name HYDROGEN PEROXIDE, AQUEOUS SOLUTION, STABILISED with more than 60% hydrogen peroxide
Class 5.1 Oxidising Substances
Subsidiary Risk(s) 8 Corrosive Substances
UN Number 2015
Hazchem 2P
Pack Group I
Special Provision No Data Available
EMS F-H, S-Q
Marine Pollutant No

Air Transport

IATA DGR

Proper Shipping Name	HYDROGEN PEROXIDE, AQUEOUS SOLUTION, STABILISED with more than 60% hydrogen peroxide
Class	5.1 Oxidising Substances
Subsidiary Risk(s)	8 Corrosive Substances
UN Number	2015
Hazchem	2P
Pack Group	I
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)
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15. REGULATORY INFORMATION

General Information	No Data Available
Poisons Schedule (Aust)	Schedule 6

Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

Approval Code	HSR001449
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National/Regional Inventories

Australia (AICS)	Listed
Canada (DSL)	Not Determined
Canada (NDSL)	Not Determined
China (IECSC)	Not Determined
Europe (EINECS)	231-765-0
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

16. OTHER INFORMATION

Related Product Codes	HYPERB7000, HYPERO6300, HYPERV7000
Revision	4
Revision Date	01 Feb 2020
Reason for Issue	Updated sds
Key/Legend	<p>< Less Than > Greater Than AICS Australian Inventory of Chemical Substances atm Atmosphere CAS Chemical Abstracts Service (Registry Number) cm² 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/cm³ 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/m³ 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 m³ Cubic Metre mbar Millibar mg Milligram mg/24H Milligrams per 24 Hours mg/kg Milligrams per Kilogram mg/m³ Milligrams per Cubic Metre Misc or Miscible Liquids form one homogeneous liquid phase regardless of the amount of either component present. mm Millimetre mmH₂O Millimetres of Water mPa.s Millipascals per Second N/A Not Applicable NIOSH National Institute for Occupational Safety and Health NOHSC National Occupational 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</p>

