



SAFETY DATA SHEET GLUTARALDEHYDE 50% REVISION 4, DATE 18 JAN 21

1. IDENTIFICATION

Product Name	Glutaraldehyde 50%
Other Names	No Data Available
Uses	For industrial use ONLY.
Chemical Family	No Data Available
Chemical Formula	Unspecified
Chemical Name	Glutaraldehyde solution
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)

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

Acute Toxicity (Oral) - Category 3
 Acute Toxicity (Inhalation) - Category 2
 Skin Corrosion/Irritation - Category 1B
 Serious Eye Damage/Irritation - Category 1
 Sensitisation (Respiratory) - Category 1
 Sensitisation (Skin) - Category 1
 Specific Target Organ Toxicity (Single Exposure) - Category 3
 Acute Hazard To The Aquatic Environment - Category 1
 Long-term Hazard To The Aquatic Environment - Category 2

Pictograms**Signal Word**

Danger

Hazard Statements

H301 Toxic if swallowed.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H330 Fatal if inhaled.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 May cause respiratory irritation.
H400 Very toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects.
AUH071 Corrosive to the respiratory tract

Precautionary Statements

Prevention

P260 Do not breathe mist/vapour/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P284 Wear respiratory protection.
P273 Avoid release to the environment.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.

Response

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor.
P304 + P340 IF INHALED: Remove victim to fresh air and keep comfortable for breathing.
P310 Immediately call a POISON CENTER or doctor.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304 + P340 IF INHALED: Remove victim to fresh air and keep comfortable for breathing.
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P363 Wash contaminated clothing before reuse.
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
P391 Collect spillage.

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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

Health Hazards	6.1B	Substances that are acutely toxic - Fatal
	6.1C	Substances that are acutely toxic- Toxic
	6.5A	Substances that are respiratory sensitisers
	6.5B	Substances that are contact sensitisers
	6.9B	Substances that are harmful to human target organs or systems
	8.2B	Substances that are corrosive to dermal tissue UN PGII
	8.3A	Substances that are corrosive to ocular tissue
	9.1A	Substances that are very ecotoxic in the aquatic environment
	9.1D	Substances that are slightly harmful to the aquatic environment or are otherwise designed for biocidal action
	9.2A	Substances that are very ecotoxic in the soil environment
Environmental Hazards	9.3A	Substances that are very ecotoxic to terrestrial vertebrates

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Glutaraldehyde	C5H8O2	111-30-8	>=50 %
Methanol	No Data Available	67-56-1	<=2 %
Water	H2O	7732-18-5	Balance %

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

Swallowed

IF SWALLOWED: Rinse mouth thoroughly, then drink 200 - 300 ml water. 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. Transport to emergency facility immediately.

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 flushing until advised to stop by a Poisons Information Centre or a doctor, or for at least 15 - 30 minutes. Obtain prompt medical consultation, preferably

from an ophthalmologist.

*Chemical eye burns may require extended irrigation. If burn is present, treat as any thermal burn, after decontamination.

Skin	IF ON SKIN (or hair): Remove contaminated clothing and shoes immediately. Wash skin and hair with plenty of soap and running water for at least 15 minutes. For minor skin contact, avoid spreading material on unaffected skin. Immediately call a Poison Centre or doctor/physician for advice. Wash contaminated clothing and shoes before reuse. Shoes and other leather items which cannot be decontaminated should be disposed of properly.
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 - 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 emergency facility immediately.
Advice to Doctor	Treat according to symptoms (decontamination, vital functions), no known specific antidote. Keep victim calm and warm - Obtain immediate medical care. Respiratory symptoms, including pulmonary edema, may be delayed. Medical monitoring for at least 24 - 48 hours. Ensure that attending medical personnel are aware of the identity and nature of the product(s) involved, and take precautions to protect themselves.
Medical Conditions Aggravated by Exposure	May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

5. FIRE FIGHTING MEASURES

General Measures	If safe to do so, move undamaged containers from fire area. Cool containers with water spray until well after fire is out. Avoid getting water inside containers.
Flammability Conditions	Non-combustible; Residues can burn. This material will not burn until the water has evaporated.
Extinguishing Media	If material is involved in a fire, use dry chemical, Carbon dioxide (CO ₂), foam or water spray for extinction - Do not use water jets.
Fire and Explosion Hazard	Containers may explode when heated.
Hazardous Products of Combustion	Fire or heat will produce irritating, toxic and/or corrosive gases, including Carbon monoxide, Carbon dioxide.
Special Fire Fighting Instructions	Contain runoff from fire control or dilution water - Runoff may be toxic and/or corrosive and pollute waterways.
Personal Protective Equipment	Wear self-contained breathing apparatus (SCBA) and chemical splash suit. Fully-encapsulating, gas-tight suits should be worn for maximum protection. Structural firefighter's uniform is NOT effective for this material.
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	2X

6. ACCIDENTAL RELEASE MEASURES

General Response Procedure	Ensure adequate ventilation - Ventilate enclosed spaces before entering. ELIMINATE all ignition sources. Do not touch or walk through spilled material. Do not breathe vapours and prevent contact with eyes, skin and clothing.
Clean Up Procedures	Absorb with earth, sand or other non-combustible material and transfer to a suitable container for disposal (see SECTION 13).
Containment	Stop leak if safe to do so – Prevent entry into waterways, drains or confined areas.
Decontamination	Deactivate with sodium bisulfite (2-3 parts (by weight) per part of active substance glutaraldehyde), collect the neutralized liquid and place in a drum for transit to an approved disposal site.
Environmental Precautionary Measures	Spillages and decontamination runoff should be prevented from entering drains and watercourses.
Evacuation Criteria	Spill or leak area should be isolated immediately. 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 250 m.

Personal Precautionary Measures Do not touch damaged containers or spilled material unless wearing appropriate protective clothing (see SECTION 8). Wear SCBA and chemical splash suit. Fully-encapsulating, gas-tight suits should be worn for maximum 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. Avoid aerosol formation. Do not breathe mist/vapours/aerosols and prevent contact with eyes, skin and clothing. Do not ingest. Wear protective gloves/protective clothing/eye protection/face protection; Wear respiratory protection (see SECTION 8). Avoid release to the environment - Collect spillage (see SECTION 6).

Storage Store in a cool, dry and well-ventilated place, out of direct sunlight. Protect against freezing. Keep container tightly closed. Keep away from heat and sources of ignition - No smoking. Keep away from food/feedstuffs and incompatible materials (see SECTION 10). Store locked up.

Container Keep only in the original container or suitable material. Do not store in Aluminum, Carbon steel, Copper, Mild steel, Iron.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General COMPONENT: Glutaraldehyde (CAS No. 111-30-8):
 - Safe Work Australia Exposure Standard: Peak limitation = 0.1 ppm (0.41 mg/m³).
 - New Zealand Workplace Exposure Standard (2019): Ceiling = 0.05 ppm (0.21 mg/m³); Dermal sensitiser (dsen); Respiratory sensitiser (rsen).
 - NIOSH REL: Ceiling = 0.2 ppm (0.8 mg/m³); NIOSH recommends that Aldehydes (low molecular weight) be considered potential occupational carcinogens in conformance with the OSHA carcinogen policy.

Exposure Limits No Data Available

Biological Limits No information available.

Engineering Measures Use local exhaust ventilation or other engineering controls to maintain airborne levels below recommended exposure limits. Adequate ventilation must be provided to keep the vapour concentration in work areas as low as possible.

Personal Protection Equipment - Respiratory protection: Wear respiratory protection. Recommended: Full-face organic vapour cartridge with a particulate pre-filter or positive-pressure supplied-air respirator, depending on the potential airborne concentration. For operations such as spraying/misting and other conditions, such as emergencies, where the exposure guideline may be greatly exceeded, use an approved positive-pressure self-contained breathing apparatus or positive-pressure airline with auxiliary self-contained air supply (refer to AS/NZS 1715 & 1716).
 - Eye/face protection: Wear appropriate eye protection to prevent eye contact. Recommended: Use chemical goggles. If exposure causes eye discomfort, use a full-face respirator.
 - Hand protection: Wear protective gloves. Recommended: Use gloves chemically resistant to this material, e.g. Butyl rubber.
 - Skin/body protection: Wear appropriate personal protective clothing to prevent skin contact. Recommended: Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron or full body suit will depend on the task.

Special Hazards Precautions No information available.

Work Hygienic Practices Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Take off contaminated clothing and wash before storage or reuse. Contaminated work clothing should not be allowed out of the workplace.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Liquid

Appearance Liquid

Odour Pungent

Colour	Colourless to light yellow
pH	3 - 5
Vapour Pressure	20 hPa (20.1 °C) - 28 hPa (25.1 °C) (@ No Data Available)
Relative Vapour Density	1.05 Air = 1
Boiling Point	101.5 °C
Melting Point	No Data Available
Freezing Point	-18 °C
Solubility	Soluble in benzene, ethanol and other organic solvents - Soluble in water; Soluble in diethyl ether
Specific Gravity	1.115 - 1.136 (Water = 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	No Data Available
Density	No Data Available
Specific Heat	No Data Available
Molecular Weight	100.12
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	Not applicable.
Fast or Intensely Burning Characteristics	No information available.
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	Non-combustible; Residues can burn. This material will not burn until the water has evaporated.
Reactions That Release Gases or Vapours	Fire or heat will produce irritating, toxic and/or corrosive gases, including Carbon monoxide, Carbon dioxide.
Release of Invisible Flammable Vapours and Gases	No information available.

10. STABILITY AND REACTIVITY

General Information	Active ingredient decomposes at elevated temperatures. The substance is a strong reducing agent. It reacts with strong bases, strong acids and strong oxidants; This generates fire and explosion hazard.
Chemical Stability	The product is stable if stored and handled as prescribed/indicated.

Conditions to Avoid	Avoid aerosol formation. Keep away from heat and sources of ignition.
Materials to Avoid	Incompatible/reactive with acids, bases, amines, ammonia, strong oxidisers. Avoid contact with metals, such as Aluminum, Carbon steel, Copper, Iron, Mild steel.
Hazardous Decomposition Products	Fire or heat will produce irritating, toxic and/or corrosive gases, including Carbon monoxide, Carbon dioxide. Decomposition products depend upon temperature, air supply and the presence of other materials.
Hazardous Polymerisation	Polymerisation will not occur.

11. TOXICOLOGICAL INFORMATION

General Information	<ul style="list-style-type: none">- Acute toxicity: Toxic if swallowed. Fatal if inhaled. Corrosive to the respiratory tract. Swallowing may result in irritation or burns of the mouth, throat and gastrointestinal tract. Excessive exposure may cause headache, dizziness, anesthetic effects, drowsiness, unconsciousness, other central nervous system effects.- Skin corrosion/irritation: Causes severe skin burns. Symptoms may include pain, severe local redness and tissue damage.- Eye damage/irritation: Causes serious eye damage. May cause severe irritation with corneal injury and result in permanent impairment of vision, even blindness.- Respiratory/skin sensitisation: May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Asthma-like symptoms may include coughing, difficult breathing and a feeling of tightness in the chest. Breathing difficulties may be life threatening.- Germ cell mutagenicity: The substance was mutagenic in various test systems with bacteria and cell cultures; however, these results could not be confirmed in animal tests.- Carcinogenicity: In long-term animal studies, in which the substance was given in drinking water in high concentrations, a carcinogenic effect was not observed. In long-term animal studies, in which the substance was given by inhalation, a carcinogenic effect was not observed.- Reproductive toxicity: The results of animal studies gave no indication of a fertility impairing effect. No indications of a developmental/teratogenic effect in animal studies.- STOT (single exposure): May cause respiratory irritation. Vapour from heated material or mist may cause serious adverse effects, even death. Vapour may cause severe irritation of the upper respiratory tract (nose and throat).- STOT (repeated exposure): The substance may cause damage to the upper respiratory tract after repeated inhalation.- Aspiration toxicity: Aspiration into the lungs may occur during ingestion or vomiting, causing tissue damage or lung injury.
Acute	
Ingestion	Acute toxicity (Oral): - LD50, Rat (female): approx. 77 mg/kg [Information on glutaral; Supplier's SDS].
Inhalation	Acute toxicity (Inhalation): - LC50, Rat (male/female): 0.28 - 0.39 mg/l (4 h) aerosol [Information on glutaral; Supplier's SDS].
Carcinogen Category	None

12. ECOLOGICAL INFORMATION

Ecotoxicity	Aquatic toxicity: - Material is moderately toxic to aquatic organisms on an acute basis (LC50/EC50 between 1 and 10 mg/L in the most sensitive species tested).
Persistence/Degradability	Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.
Mobility	Potential for mobility in soil is high (Koc between 50 and 150). Volatilization from natural bodies of water or moist soil is not expected to be an important fate process.
Environmental Fate	Very toxic to aquatic life - Avoid release to the environment.
Bioaccumulation Potential	Bioconcentration potential is low (BCF < 100 or Log Pow < 3).
Environmental Impact	No Data Available

13. DISPOSAL CONSIDERATIONS**General Information**

Dispose of contents/container in accordance with all local/regional/national regulations.

Special Precautions for Land Fill

For unused and uncontaminated product, the preferred disposal options include sending to a licensed, permitted incinerator or other thermal destructive device.

14. TRANSPORT INFORMATION**Land Transport (Australia)**

ADG Code

Proper Shipping Name	CORROSIVE LIQUID, TOXIC, N.O.S. (Glutaraldehyde 50%)
Class	8 Corrosive Substances
Subsidiary Risk(s)	6.1 Toxic and Infectious Substances - Toxic Substances
EPG	37 Toxic And/Or Corrosive Substances Non-Combustible
UN Number	2922
Hazchem	2X
Pack Group	II
Special Provision	No Data Available

Land Transport (Fiji)

Proper Shipping Name	CORROSIVE LIQUID, TOXIC, N.O.S. (Glutaraldehyde 50%)
Class	8 Corrosive Substances
Subsidiary Risk(s)	6.1 Toxic and Infectious Substances - Toxic Substances
EPG	37 Toxic And/Or Corrosive Substances Non-Combustible
UN Number	2922
Hazchem	2X
Pack Group	II
Special Provision	No Data Available

Land Transport (Malaysia)

ADR Code

Proper Shipping Name	CORROSIVE LIQUID, TOXIC, N.O.S. (Glutaraldehyde 50%)
Class	8 Corrosive Substances
Subsidiary Risk(s)	6.1 Toxic and Infectious Substances - Toxic Substances
EPG	37 Toxic And/Or Corrosive Substances Non-Combustible
UN Number	2922
Hazchem	2X
Pack Group	II
Special Provision	No Data Available

Land Transport (New Zealand)

NZS5433

Proper Shipping Name	CORROSIVE LIQUID, TOXIC, N.O.S. (Glutaraldehyde 50%)
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Class	8 Corrosive Substances
Subsidiary Risk(s)	6.1 Toxic and Infectious Substances - Toxic Substances
EPG	37 Toxic And/Or Corrosive Substances Non-Combustible
UN Number	2922
Hazchem	2X
Pack Group	II
Special Provision	No Data Available

Land Transport (United States of America)

US DOT

Proper Shipping Name	CORROSIVE LIQUID, TOXIC, N.O.S. (Glutaraldehyde 50%)
Class	8 Corrosive Substances
Subsidiary Risk(s)	6.1 Toxic and Infectious Substances - Toxic Substances
ERG	154 Substances - Toxic and/or Corrosive (Non-Combustible)
UN Number	2922
Hazchem	2X
Pack Group	II
Special Provision	No Data Available

Sea Transport

IMDG Code

Proper Shipping Name	CORROSIVE LIQUID, TOXIC, N.O.S. (Glutaraldehyde 50%)
Class	8 Corrosive Substances
Subsidiary Risk(s)	6.1 Toxic and Infectious Substances - Toxic Substances
UN Number	2922
Hazchem	2X
Pack Group	II
Special Provision	No Data Available
EMS	F-A, S-A
Marine Pollutant	Yes

Air Transport

IATA DGR

Proper Shipping Name	CORROSIVE LIQUID, TOXIC, N.O.S. (Glutaraldehyde 50%)
Class	8 Corrosive Substances
Subsidiary Risk(s)	6.1 Toxic and Infectious Substances - Toxic Substances
UN Number	2922
Hazchem	2X
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)
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15. REGULATORY INFORMATION

General Information GLUTARAL
Poisons Schedule (Aust) Schedule 6

Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

Approval Code HSR006394

National/Regional Inventories

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

16. OTHER INFORMATION

Related Product Codes GLUTER1000, GLUTER1001, GLUTER4000, GLUTER4500, GLUTER4501, GLUTER4503, GLUTER4510, GLUTER4511, GLUTER7500, GLUTER7501, GLUTER7502, GLUTER7503, GLUTER7504, GLUTER7505

Revision 4

Revision Date 18 Jan 2021

Key/Legend

- < 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 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