

Safety Data Sheet Isopropyl alcohol Revision 4, Date 12 Dec 2017

1. IDENTIFICATION

Product Name Isopropyl alcohol

Other Names IPA; Isopropanol

Uses For industrial use - Cosmetic use: Cosmetics, hair sprays and colours. Commercial use: A solvent; an industrial

detergent; a dry cleaning agent; fuel and lubricant additives; welding and soldering agents. Domestic use: Printing inks and surface coatings; adhesives; cleaning/washing agents, including in domestic detergents; and colouring

agents. Site-limited use: As a chemical intermediate; and in analytical laboratory work.

Non-industrial use: As a solvent in pharmaceutical products.

Chemical Family No Data Available

Chemical Formula C3H8O **Chemical Name** 2-Propanol **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) Not Scheduled

Sydney



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

Serious Eye Damage/Irritation - Category 2A

Specific Target Organ Toxicity (Single Exposure) - Category 3

Pictograms





Signal Word Danger

Hazard Statements H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

Precautionary Statements Prevention P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting and all other equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P261 Avoid breathing fumes/gas/mist/vapours/spray.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/eye protection/face protection.

Response P303 + P361 + P353 IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.

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P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position

comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

P337 + P313 If eye irritation persists: Get medical advice/attention.

P370 + P378 In case of fire: Use carbon dioxide (CO2), dry chemical, alcohol resistant foam or

water spray for extinction.

Storage **P403 + P235** Store in a well-ventilated place. Keep cool.

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 **3.1B** Flammable liquid - high hazard

Hazards

Health Hazards **6.1E** Substances that are acutely toxic –May be harmful, Aspiration hazard

6.3B Substances that are mildly irritating to the skin

6.4A Substances that are irritating to the eye

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	Formula	CAS Number	Proportion
2-Propanol	No Data Available	67-63-0	100 %

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

Swallowed IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. If vomiting occurs, lean patient forward or place on left side

(head-down position, if possible) to

maintain an open airway and prevent aspiration. Keep victim calm and warm - Obtain immediate medical care. Never

give anything by mouth to an unconscious person.

Eye IF IN EYES: Immediately flush eyes with running water for several minutes, occasionally lifting the upper and lower

lids. Remove contact lenses if present and easy to do. Continue rinsing for at least 15 minutes. If eye irritation

persists, get medical advice/attention.

Skin IF ON SKIN: Remove contaminated clothing and shoes immediately. Flush skin with running water for at least 15

minutes and/or wash with plenty of soap and water. If skin irritation occurs, get medical advice/attention. 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. 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. Keep victim

calm and warm - Obtain immediate medical care.

Advice to Doctor Show this safety data sheet to the doctor in attendance. Ensure that attending medical personnel are aware of

identity and nature of product(s) involved, and take precautions to protect themselves.

Medical Conditions Aggravated

by Exposure

Use of alcoholic beverages enhances the harmful effect.

5. FIRE FIGHTING MEASURES

General Measures Public safety hazard: IMMEDIATELY CONTACT POLICE OR FIRE BRIGADE. Evacuate all unprotected personnel

from area. Keep upwind and to higher ground.

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 HIGHLY FLAMMABLE: Low flashpoint - Will be easily ignited by heat, sparks or flames.

Extinguishing Media Use dry chemical, Carbon dioxide (CO2), alcohol-resistant foam or water spray for extinction – Do not use water jets.

Alcohol resistant foam is the preferred firefighting medium but, if it is not available, fine water spray can be used.

Caution: Use of water spray when fighting fire may be inefficient.

Fire and Explosion Hazard Risk of violent reaction or explosion: Vapours will form explosive mixtures with air. Vapours may travel to source of

ignition and flash back. Most vapours are heavier than air and will collect in low or confined areas (drains, basements, tanks). Many liquids are lighter than water. Containers may explode when heated. Vapours from runoff may create an

explosion hazard.

Hazardous Products of

Combustion

Fire will produce irritating, toxic and/or corrosive gases.

Special Fire Fighting

Instructions

Contain runoff from fire control or dilution water - Runoff may pollute waterways; Vapours from runoff may create an

explosion hazard.

Personal Protective Equipment Wear self-contained breathing apparatus (SCBA) in combination with normal firefighting clothing (full fire kit/bunker

gear).

Flash Point $12 \,^{\circ}\mathrm{C}$ Lower Explosion Limit $2 \,^{\circ}\mathrm{C}$ Upper Explosion Limit $12 \,^{\circ}\mathrm{C}$

Auto Ignition Temperature No Data Available

Hazchem Code •2YE

6. ACCIDENTAL RELEASE MEASURES

General Response Procedure Ensure adequate ventilation - Ventilate enclosed spaces before entering. ELIMINATE all ignition sources (no smoking,

flares, sparks or flame). All equipment used when handling the product must be earthed. Do not touch or walk

through spilled material. Avoid breathing vapours and contact with eyes, skin and clothing.

Clean Up Procedures Absorb with earth, sand or other non-combustible material. Use clean, non-sparking tools to collect absorbed

material and place it in suitable, properly labelled containers for disposal (see SECTION 13).

Containment Stop leak if safe to do so – Prevent entry into waterways, drains or confined areas. Vapour-suppressing foam may be

used to control vapours.

Decontamination No information available.

Environmental Precautionary

Measures

Evacuation Criteria

Spillages and decontamination runoff should be prevented from entering drains and watercourses - Runoff may

pollute waterways; Vapours from runoff may create an explosion hazard.

Spill or leak area should be isolated immediately. Keep upwind and to higher ground. Keep unauthorised personnel

away. For large spills: IMMEDIATELY CONTACT POLICE OR FIRE BRIGADE; Consider downwind evacuation.

Personal Precautionary

Measures

SCBA and gas-tight suits should be worn when dealing with damaged or leaking containers and where there is no risk of ignition. SCBA and structural firefighting uniform provide VERY limited protection where there is a risk of

ignition.

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 breathing mist/vapours/spray and contact with eyes, skin and clothing. Use personal protective equipment as required (see SECTION 8). HIGHLY FLAMMABLE LIQUID: Keep away from heat and all sources of ignition - No smoking. Ground/bond container and receiving equipment. Use explosion-proof electrical/lighting/ventilating equipment. Use only non-sparking tools. Take precautionary measures against static

discharge. Vent container carefully before opening.

Storage Storage Store in a cool, dry and well-ventilated place, out of direct sunlight. Keep containers tightly closed when not in use.

Keep away from heat and all sources of ignition - No smoking. Keep away from incompatible materials (see SECTION

10). Store locked up.

Container Keep in the original container. "Empty" containers retain residue and/or vapour and may be dangerous. Do not cut,

weld, braze solder, drill, grind or expose such containers to heat, flames, sparks, or other ignition sources.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General Isopropyl alcohol (CAS No. 67-63-0):

- Safe Work Australia Exposure Standard: TWA = 400 ppm (983 mg/m3); STEL = 500 ppm (1,230 mg/m3).

- New Zealand WES: TWA = 400 ppm (983 mg/m3); STEL = 500 ppm (1,230 mg/m3).

- NIOSH REL: TWA = 400 ppm (980 mg/m3); STEL = 500 ppm (1,225 mg/m3).

- OSHA PEL: TWA = 400 ppm (980 mg/m3).

- Immediately dangerous to life or health (IDLH) concentration: 2,000 ppm.

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. Use explosion-proof electrical/lighting/ventilating equipment.

Personal Protection Equipment - Respiratory protection: Wear respiratory protection in case of inadequate ventilation or when vapour/aerosols are

generated. Recommended: Filter type: A (organic vapour).

- Eye/face protection: Wear appropriate eye protection to prevent eye contact. Recommended: Goggles; do not wear contact lenses when handling this product.
- Hand protection: Wear protective gloves. Recommended: Impervious, solvent-resistant gloves.
- Skin/body protection: Wear appropriate personal protective clothing to avoid skin contact. Recommended: Impervious apron and work boots where splashing may occur.

Special Hazards Precaustions

No information available.

Work Hygienic Practices

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Liquid

Appearance Clear liquid

Odour Strong alcohol odour

Colour Colourless

pH No Data AvailableVapour Pressure 4.4 kPa (@ 20 °C)

Relative Vapour Density2.1 Air = 1Boiling Point82 - 83 °CMelting PointNo Data AvailableFreezing PointNo Data AvailableSolubilityMiscible with waterSpecific Gravity0.78 - 0.79

Flash Point 12 °C

Auto Ignition Temp No Data Available **Evaporation Rate** 2.4 (Butyl acetate = 1) **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 No Data Available **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 100 %

Additional Characteristics No information available.

Potential for Dust Explosion Not applicable.

Fast or Intensely Burning

Characteristics

No information available.

No information available.

Rate of Solid Materials
Non-Flammables That Could

Flame Propagation or Burning

No information available.

Contribute Unusual Hazards to a

Properties That May Initiate or Contribute to Fire Intensity

HIGHLY FLAMMABLE: Low flashpoint - Will be easily ignited by heat, sparks or flames.

Reactions That Release Gases

or Vapours

Fire will produce irritating, toxic and/or corrosive gases.

Release of Invisible Flammable

Vapours and Gases

Vapours will form explosive mixtures with air.

10. STABILITY AND REACTIVITY

General Information Reacts with strong oxidants. Attacks some plastics and rubber.

Chemical Stability Stable.

Conditions to Avoid Keep away from heat and all sources of ignition.

Materials to Avoid Incompatible/reactive with strong oxidisers, acetaldehyde, chlorine, ethylene oxide, acids, isocyanates.

Hazardous Decomposition

Products

Fire will produce irritating, toxic and/or corrosive gases. Under incomplete combustion conditions, oxides of Carbon

and Nitrogen.

Hazardous Polymerisation Will not occur.

11. TOXICOLOGICAL INFORMATION

General Information - Acute toxicity: Low degree of toxicity by ingestion; May cause abdominal pain, nausea, vomiting, unconsciousness.

Low to moderate degree of toxicity by inhalation.

- Skin corrosion/irritation: The substance may defat the skin, which may cause dryness or cracking.

- Eye damage/irritation: Causes serious eye irritation, redness.

- Respiratory/skin sensitisation: No information available.

- Germ cell mutagenicity: No information available.

- Carcinogenicity: Isopropyl alcohol (CAS No. 67-63-0) is classified in Group 3 of the IARC Monographs: Not

classifiable as to its carcinogenicity to humans. - Reproductive toxicity: No information available.

- STOT (single exposure): May cause irritation to the upper respiratory tract and may cause headache, drowsiness or

dizziness (CNS depression).

- STOT (repeated exposure): No information available.

- Aspiration toxicity: Risk of aspiration, pneumonia (chemical pneumonitis).

Acute

Other

Ingestion Acute toxicity (Oral):

- LD50, Rat: 5,045 mg/kg Acute toxicity (Dermal):

- LD50, Rabbit: 12,800 mg/kg

Inhalation Acute toxicity (Inhalation):

- LC50, Rat: 16,000 ppm (8 h)

Carcinogen Category None

12. ECOLOGICAL INFORMATION

Ecotoxicity No information available. Persistence/Degradability Readily biodegradable. Mobility No information available.

Environmental Fate Prevent entry into soils, drains and waterways.

Bioaccumulation Potential No information available. **Environmental Impact** No Data Available

13. DISPOSAL CONSIDERATIONS

General Information Dispose of by controlled incineration and in accordance with local/regional/national regulations.

Special Precautions for Land Fill Empty containers should be air-dried before disposal.

14. TRANSPORT INFORMATION

Land Transport (Australia)

ADG Code

Proper Shipping Name ISOPROPANOL (ISOPROPYL ALCOHOL)

Class 3 Flammable Liquids
Subsidiary Risk(s) No Data Available

EPG 16 Liquids - Highly Flammable, Toxic

 UN Number
 1219

 Hazchem
 •2YE

 Pack Group
 Ⅱ

Special Provision No Data Available

Land Transport (Malaysia)

ADR Code

Proper Shipping Name ISOPROPANOL (ISOPROPYL ALCOHOL)

Class 3 Flammable Liquids
Subsidiary Risk(s) No Data Available

EPG 16 Liquids - Highly Flammable, Toxic

 UN Number
 1219

 Hazchem
 2YE

 Pack Group
 II

Special Provision No Data Available

Land Transport (New Zealand)

NZS5433

Proper Shipping Name ISOPROPANOL (ISOPROPYL ALCOHOL)

Class 3 Flammable Liquids
Subsidiary Risk(s) No Data Available

EPG 16 Liquids - Highly Flammable, Toxic

 UN Number
 1219

 Hazchem
 2YE

 Pack Group
 II

Special Provision No Data Available

Land Transport (United States of America)

US DOT

Proper Shipping Name ISOPROPANOL (ISOPROPYL ALCOHOL)

Class 3 Flammable Liquids
Subsidiary Risk(s) No Data Available

ERG 129 Flammable Liquids (Polar / Water-Miscible / Noxious)

UN Number 1219 **Hazchem** 2YE

Pack Group

Special Provision No Data Available

Sea Transport

IMDG Code

Proper Shipping Name ISOPROPANOL (ISOPROPYL ALCOHOL)

Class 3 Flammable Liquids
Subsidiary Risk(s) No Data Available

 UN Number
 1219

 Hazchem
 2YE

 Pack Group
 II

Special Provision No Data Available

EMS F-E, S-D **Marine Pollutant** No

Air Transport

IATA DGR

Proper Shipping Name ISOPROPANOL (ISOPROPYL ALCOHOL)

Class 3 Flammable Liquids
Subsidiary Risk(s) No Data Available

 UN Number
 1219

 Hazchem
 2YE

 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 ClassificationDangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods

by Road & Rail (ADG Code)

15. REGULATORY INFORMATION

General InformationNo Data AvailablePoisons Schedule (Aust)Not Scheduled

Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

Approval Code HSR001180

National/Regional Inventories

Australia (AICS) Listed

Canada (DSL) Listed

Canada (NDSL) Not Listed

China (IECSC) Listed

Europe (EINECS) 200-661-7

Europe (REACh) Listed

Japan (ENCS/METI) 2-207

Korea (KECI) KE-29363

Malaysia (EHS Register) Listed

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

ISPRAL0200, ISPRAL0300, ISPRAL0500, ISPRAL0501, ISPRAL0502, ISPRAL0505, ISPRAL0510, ISPRAL0515, ISPRAL0520, ISPRAL0700, ISPRAL0701, ISPRAL0800, ISPRAL0810, ISPRAL1000, ISPRAL1001, ISPRAL1002, ISPRAL1003, ISPRAL1004, ISPRAL1005, ISPRAL1006, ISPRAL1007, ISPRAL1008, ISPRAL1009, ISPRAL1010, ISPRAL1011, ISPRAL1012, ISPRAL1013, ISPRAL1014, ISPRAL1015, ISPRAL1016, ISPRAL1017, ISPRAL1018, ISPRAL1019, ISPRAL1020, ISPRAL1021, ISPRAL1022, ISPRAL1023, ISPRAL1024, ISPRAL1025, ISPRAL1026, ISPRAL1027, ISPRAL1028, ISPRAL1029, ISPRAL1030, ISPRAL1031, ISPRAL1032, ISPRAL1033, ISPRAL1034, ISPRAL1035, ISPRAL1036, ISPRAL1037, ISPRAL1038, ISPRAL1039, ISPRAL1040, ISPRAL1041, ISPRAL1042, ISPRAL1043, ISPRAL1044, ISPRAL1045, ISPRAL1048, ISPRAL1060, ISPRAL1100, ISPRAL1500, ISPRAL1501, ISPRAL1800, ISPRAL1801, ISPRAL1802, ISPRAL1803, ISPRAL1804, ISPRAL1805, ISPRAL1806, ISPRAL1807, ISPRAL1808, ISPRAL1809, ISPRAL1810, ISPRAL1811, ISPRAL1812, ISPRAL1813, ISPRAL1814, ISPRAL1815, ISPRAL1816, ISPRAL1817, ISPRAL1818, ISPRAL1819, ISPRAL1820, ISPRAL1821, ISPRAL1822, ISPRAL1823, ISPRAL1824, ISPRAL1825, ISPRAL1826, ISPRAL1827, ISPRAL1828, ISPRAL1829, ISPRAL1830, ISPRAL1831, ISPRAL1832, ISPRAL1900, ISPRAL1901, ISPRAL2000, ISPRAL2001, ISPRAL2200, ISPRAL2201, ISPRAL2500, ISPRAL3000, ISPRAL3001, ISPRAL3002, ISPRAL3003, ISPRAL3005, ISPRAL3010, ISPRAL3011, ISPRAL3012, ISPRAL3020, ISPRAL3030, ISPRAL3040, ISPRAL3050, ISPRAL3060, ISPRAL3070, ISPRAL3080, ISPRAL3090, ISPRAL3100, ISPRAL3110, ISPRAL3120, ISPRAL3130, ISPRAL3140, ISPRAL3141, ISPRAL3142, ISPRAL3143, ISPRAL3144, ISPRAL3145, ISPRAL3150, ISPRAL3160, ISPRAL3170, ISPRAL3500, ISPRAL3501, ISPRAL3800, ISPRAL4000, ISPRAL4001, ISPRAL4002, ISPRAL4003, ISPRAL4004, ISPRAL4005, ISPRAL4006, ISPRAL4500, ISPRAL5000, ISPRAL5100, ISPRAL5110, ISPRAL5120, ISPRAL5500, ISPRAL5510, ISPRAL5600, ISPRAL6000, ISPRAL6200, ISPRAL6400, ISPRAL6401, ISPRAL6500, ISPRAL6501, ISPRAL6510, ISPRAL6550, ISPRAL6600, ISPRAL7000, ISPRAL7001, ISPRAL7100, ISPRAL7200, ISPRAL7300, ISPRAL7400, ISPRAL7500, ISPRAL7600, ISPRAL8000, ISPRAL8001, ISPRAL8002, ISPRAL8100, ISPRAL8200, ISPRAL8300, ISPRAL8400, ISPRAL8500, ISPRAL8600, ISPRAL8700, ISPRAL9000, ISPRAL9100, ISPRAL9500, ISPRAL9900, ISPROL0500, ISPROL1000, ISPROL3000, ISPROL6500, ISPROL6600, ISPROL8000, ISPROL8001, ISPROL8100, ISPROL8101

Revision

AICS Australian Inventory of Chemical Substances

atm Atmosphere

CAS Chemical Abstracts Service (Registry Number)

cm² Square CentimetresCO2 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/I 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

Ib 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.

Itr 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