

Safety Data Sheet Propylene Glycol Revision 3, Date 02 Feb 2016

1. IDENTIFICATION

Product Name Propylene Glycol

Other Names 1,2-PROPANEDIOL; 1,2-Propylene glycol; Isopropylene glycol; Methyl Ethyl Glycol (MEG); Methylethylene Glycol

Uses Monopropylene Glycol USP - Generally accepted for use in food, animal feed, flavours and cosmetics and as a

exipient (inactive carrier) for pharmaceuticals. Restrictions or limitations set by local regulations have to be followed. Monopropylene Glycol Industrial - Generally accepted for use as a component in the manufacture of unsaturated

polyester resins, functional fluids, paints and coatings and plasticisers.

Chemical Family No Data Available

Chemical Formula C3H8O2

Chemical Name Propylene Glycol **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

Not scheduled Poisons Schedule (Aust)

Globally Harmonised System

Corporate Office Sydney Locked Bag 15 Minto NSW 2566 Australia 2 Swettenham Road Minto NSW 2566 Australia All Deliveries: 4 Holmes Road Minto NSW 2566 Australia

Phone E-mail ABN

+61 2 9733 3000 +61 2 9733 3111 svdnev@redox.com www.redox.com 92 000 762 345

Adelaide Brisbane Melbourne Perth Sydney

Auckland

New Zealand Kuala Lumpur USA Hawke's Bay Los Angeles



Hazard Classification NOT hazardous according to the Criteria of the Globally Harmonised System of Classification and

Labelling of Chemicals (GHS)

Signal Word None

National Transport Commission (Australia)

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

Dangerous Goods Classification NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous

Goods by Road & Rail (ADG Code)

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Propane-1,2-Diol	No Data Available	57-55-6	99.94 - 100 %
Water	No Data Available	7732-18-5	0 - 0.05 %
1-1'-oxydipropan-2-ol	No Data Available	110-98-5	0 - 0.01 %

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

Swallowed No treatment necessary unless large quantities are swallowed. Rinse mouth with water. Give water to drink. Do NOT

induce vomiting. If symptoms develop, seek medical attention.

Eye Immediately flush eyes with plenty of water for 15 minutes, holding eyelids open. If irritation persists, seek medical

atternion.

Skin Remove contaminated clothing. Wash affected area with soap and plenty of water. If irritation persists, seek medical

advice.

Inhaled Remove victim from exposure to fresh air. If rapid recovery does not occur, seek medical advice.

Advice to Doctor Treat symptomatically based on judgement of doctor and individual reactions of patient. Following cases of gross

over-exposure, investigation of liver, kidney and eye function may be advisable. Records of such incidents should be

maintained for future reference.

Medical Conditions Aggravated

by Exposure

Indication of any immediate medical attention and special treatment needed:

Treat symptomatically. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient. It is only slightly irritating to mucous membranes and skin. It is also of low toxicity following acute ingestion After absorption of high doses, systemic effects like CNS depression may occur. Hot vapours may

cause lung damage.

5. FIRE FIGHTING MEASURES

General Measures If safe to do so, remove containers from the path of fire.

Flammability Conditions Combustible. Will only burn if enveloped in a pre-existing fire. The vapour is heavier than air, spreads along the

ground and distant ignition is possible.

Extinguishing Media Suitable extinguishing media: Dry chemical, alcohol resistant foam, carbon dioxide, water spray.

Unsuitable extinguishing media: Solid water stream.

Fire and Explosion Hazard Heat from fire can generate flammable vapour. When mixed with air and exposed to ignition source, vapours can

burn in open or explode if confined. Vapours may be heavier than air. May travel long distances along the ground before igniting and flashing back to vapour source. Fine sprays/mists may be combustible at temperatures below normal flash point. Fight fire from a safe distance/protected location. Heat may build enough pressure to rupture closed containers/spreading fire/increasing risk of burns/injuries. Use water spray/fog for cooling. Avoid

frothing/steam explosion. Burning liquid may float on water. Although water soluble, may not be practical to

extinguish fire by water dilution. Notify authorities immediately if liquid enters sewer/public waters.

Hazardous Products of Combustion

Combustion

Special Fire Fighting Instructions

CO2, H2O and CO (in the absence of oxygen). At high temperatures the product decomposes producing toxic and irritant fumes.

Clear fire area of all non-emergency personnel. Stay upwind. Keep out of low areas. Eliminate ignition sources. Move fire exposed containers from fire area if it can be done without risk. Do NOT allow fire fighting water to reach

waterways, drains or sewers. Store fire fighting water for treatment.

Personal Protective Equipment Fire fighters should wear a positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting

clothing (includes fire fighting helmet, coat, trousers, boots and gloves) or chemical splash suit.

Hazchem Code No Data Available

6. ACCIDENTAL RELEASE MEASURES

General Response Procedure Eliminate all sources of ignition. Increase ventilation. Avoid walking through spilled product as it may be slippery. Use

clean, non-sparking tools and equipment.

Clean Up Procedures Extinguish all ignition sources. Stop release; prevent flow to sewers/public waters.

Notify fire and environmental authorities. Impound/recover large land spill; soak up small spill with inert solids. Soak up small spills with inert solids. Use suitable disposal containers. On water, material is soluble and may float or sink. Contain/collect rapidly to minimize dispersion. Disperse residue to reduce aquatic harm. Report per regulatory

requirements.

Containment Stop leak if safe to do so.

Environmental Precautionary

Measures

Do not allow product to reach drains, sewers or waterways. If product does enter a waterway, advise the

Environmental Protection Authority or your local Waste Authority.

Evacuation Criteria Evacuate all unnecessary personnel

Personal Precautionary

Measures

Personnel involved in the clean up should wear full protective clothing as listed in section 8.

7. HANDLING AND STORAGE

Handling Ensure an eye bath and safety shower are available and ready for use. Observe good personal hygiene practices and

recommended procedures. Wash thoroughly after handling. Take precautionary measures against static discharges by bonding and grounding equipment. Avoid contact with eyes, skin and clothing. Do not inhale product vapours.

Avoid prolonged or repeated exposure. Use local exhaust extraction over processing area.

For lines and fittings, avoid copper, copper alloys, zinc. Air-dry contaminated clothing in a well-ventilated area before

laundering. Handling Temperature: Ambient.

Prevent all contact with water and moist atmosphere. Drums should be stacked to a maximum of 3 high. Lines should be purged with nitrogen before and after product transfer. Electrostatic charges may be generated during

pumping. Electrostatic discharge may cause fire.

Storage Store in a cool, dry, diked (bunded), well-ventilated area. Store away from heat. Do not store together with oxidizing

and self-igniting products. Protect from moisture. Keep containers tightly closed when not in use. Inspect regularly for deficiencies such as damage or leaks. Protect against physical damage. Store away from incompatible materials as listed in section 10. Protect from direct sunlight, heat and static discharges. Prevent all contact with water and moist atmosphere. Prevent ingress of water. Nitrogen blanket recommended for large tanks (capacity 100m3 or higher). Storage temperature: 40 Deg C Maximum. This product is classified as a 'C2' Combustible Liquid for the purpose of

storage and handling in accordance with the requirements of AS1940.

Container Store in original packaging as approved by manufacturer.

Advice on common storage:

Carbon/Mild Steel, with suitable internal coating, or stainless steel.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General The following exposure standard has been established by the Safe Work Australia (SWA);

Propane-1,2-diol: Total (vapour and particulates) CAS 57-55-6: TWA = 150 ppm (474 mg/m3)

NOTE: The exposure value at the TWA is the average airborne concentration of a particular substance when

calculated over a normal 8 hour working day for a 5 day working week.

These exposure standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

Exposure Limits No Data Available

Biological Limits No information available on biological limit values for this product.

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.

Personal Protection Equipment RESPIRATOR: No respiratory protection is ordinarily required under normal conditions of use (AS1715/1716).

EYES: Chemical splash goggles (AS1336/1337).

HANDS: Use gloves approve to relevant standard made from neoprene, PVC (AS2161). CLOTHING: Long-sleeved protective clothing and safety footwear (AS3765/2210).

Work Hygienic Practices Good work practices and the adoption of good personal hygiene measures reduce unnecessary exposures. Hot

showers should be used. Use soap and no other solvents. Grossly contaminated clothing and tools should be changed immediately and dry cleaned. Grossly contaminated clothing should be changed immediately. Gloves

should be

reviewed to prevent internal contamination. Use skin reconditioning cream after work.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical StateLiquidAppearanceLiquidOdourOdourlessColourColourless

pH No Data Available

Vapour Pressure 0.07 mmHg Pa (@ 20 °C)

Relative Vapour Density $2.62 \, \text{Air} = 1$ Boiling Point $189 \, ^{\circ}\text{C}$ Melting Point $-60 \, ^{\circ}\text{C}$ Freezing Point $-60 \, ^{\circ}\text{C}$

Solubility Soluble in water 25°C Specific Gravity No Data Available

Flash Point 99 $^{\circ}$ C Auto Ignition Temp 371 $^{\circ}$ C

Evaporation Rate No Data Available **Bulk Density** No Data Available Corrosion Rate No Data Available **Decomposition Temperature** No Data Available **Density** 1.0361 g/cm3 **Specific Heat** No Data Available **Molecular Weight** No Data Available **Net Propellant Weight** No Data Available

Octanol Water Coefficient -0.92

Particle SizeNo Data AvailablePartition CoefficientNo Data AvailableSaturated Vapour ConcentrationNo Data Available

20 °C Vapour Temperature

0.581 Poise (@ 20 °C) Viscosity **Volatile Percent** No Data Available **VOC Volume** No Data Available

Additional Characteristics Surface tension: 40.1 dynes/cm at 25°C

Water solubility: Soluble.

Molecular weight: 76.11 g/mol Vaporization heat: 168.6 cal/g

Potential for Dust Explosion Fast or Intensely Burning Characteristics

Product is a liquid. No Data Available

Flame Propagation or Burning

Rate of Solid Materials Non-Flammables That Could

No Data Available

Contribute Unusual Hazards to a

No Data Available

Properties That May Initiate or Contribute to Fire Intensity

No Data Available

Reactions That Release Gases

No Data Available

or Vapours

Release of Invisible Flammable

No Data Available

Vapours and Gases

10. STABILITY AND REACTIVITY

General Information Combustible liquid. Hygroscopic.

Chemical Stability Product is stable under normal conditions of use, storage and temperature. **Conditions to Avoid** Avoid excessive heat, flame, sparks and temperatures above 40 Deg C.

Materials to Avoid **Hazardous Decomposition**

Material can attack some forms of plastics. Do not store together with oxidizing and self-igniting products. Hazardous decomposition products may include noxious and toxic fumes of oxides of carbon, carbonyl and

dioxolane derivatives may also be formed.

Products

Hazardous Polymerisation Hazardous polymerization has not been reported.

11. TOXICOLOGICAL INFORMATION

General Information Information given is based on product testing, and/or similar products, and/or components:

Oral LD50 Rat: >2000mg/Kg Dermal LD50 Rabbit: >2000mg/Kg

Inhalation Toxicity: LC50 greater than near saturated vapour concentration.

SKIN: Not Irritating to skin.

EYES: Essentially non-irritating to eyes.

RESPIRATORY: Not expected to be a respiratory irritant.

SENSITISATION: Not a skin sensitiser.

REPEATED DOSE: Low systemic toxicity on repeated exposure. Cats given high doses of MPG in diet showed a

decrease in red blood cell survival. MUTAGENICITY: Not mutagenic.

CARCINOGENICITY: Not carcinogenic in animal studies.

REPRODUCTIVE/DEVELOPMENTAL: Not a developmental toxicant.

Ingestion Ingestion/Aspiration: May cause adverse effects on central nervous system.

> Other effects may include excitation, euphoria, headache, dizziness, drowsiness, blurred vision, fatique, tremors, convulsions, loss of consciousness, coma and even death by respiratory arrest. May also cause kidney damage and blood changes (hemoglobinuric nephrosis). Reduces intraocular pressure by raising osmotic pressure of blood.

LD50: 20 g/kg (oral-rat).

Skinlrritant In contact with skin may cause irritation, probably due dehydration; reddening, itching and inflammation.

May be absorbed through the skin. In some cases repeated contact may result in allergic skin reactions and severe irritation with appearance of vesicles and mild oedema, probably due to sweat retention. May cause slight irritation,

tearing and a burning sensation in the eyes.

LD50: 20.8 g/kg (skin-rabbit).

Eyelrritant In some cases repeated contact may result in allergic skin reactions and severe irritation with appearance of vesicles

and mild oedema, probably due to sweat retention. Mildly irritating when in contact with the eyes. May cause slight

irritation, tearing and a burning sensation in the eyes. LD50: 20.8 g/kg (skin-rabbit).

Inhalation It is unlikely due its low volatility, though prolonged exposures to saturated atmospheres may cause irritation of

respiratory system.

Carcinogen Category No Data Available

12. ECOLOGICAL INFORMATION

Ecotoxicity Acute Toxicity

Fish: Low toxicity: LC/EC/IC50 >100 mg/L

Aquatic Invertibrates: Low toxicity: LC/EC/IC50 >100 mg/L

Algae: Low toxicity: LC/EC/IC50 >100 mg/L

Microorganisms: Expected to have low toxicity: LC/EC/IC50 >100 mg/L

Persistence/Degradability This product is considered ready biodegradable.

Mobility If the product enters soil, it will be highly mobile and may contaminate ground water.

Environmental Fate Avoid contaminating waterways, drains and sewers.

Bioaccumulation Potential In accordance with column 2 of REACH Annex IX, the bioaccumulation study does not need to be conducted as the

substance can be expected to have a low potential for bioaccumulation.

Results of PBT and vPvB assessment: The substance do not meet all the specific criteria detailed in Annex XIII or do not allow a direct comparison with all the criteria in Annex XIII but nevertheless indicate that the substance would not have all these properties and the substance is not considered PBT/vPvB. "The overall conclusions, based on the present available data, of the preliminary PBT assessment are that the (screening) criteria for PBT/vPvB are not met

and that further testing in the scope of the final PBT assessment is not considered to be required.

Environmental Impact No Data Available

13. DISPOSAL CONSIDERATIONS

General Information Recover or recycle if possible. Dispose of in accordance with all local, state and federal regulations. All empty

packaging should be disposed of in accordance with Local, State, and Federal Regulations or recycled/reconditioned at an approved facility. Drain container thoroughly. After draining, vent in a safe place away from sparks and fire.

Send to drum recoverer or metal reclaimer.

Special Precautions for Land Fill Contact a specialist disposal company or the local waste regulator for advice.

14. TRANSPORT INFORMATION

Land Transport (Australia)

ADG Code

Proper Shipping Name PROPYLENE GLYCOL

Class C2 Combustible Liquids - Flash Point >93°C, Closed Cup, Not Excluded Flammable

Subsidiary Risk(s) No Data Available

No Data Available

UN Number No Data Available
Hazchem No Data Available
Pack Group No Data Available
Special Provision No Data Available

Land Transport (Malaysia)

ADR

Proper Shipping Name PROPYLENE GLYCOL

Class No Data Available Subsidiary Risk(s) No Data Available

No Data Available

UN Number No Data Available Hazchem No Data Available **Pack Group** No Data Available **Special Provision** No Data Available

Land Transport (New Zealand)

NZS5433

Proper Shipping Name PROPYLENE GLYCOL

Class No Data Available Subsidiary Risk(s) No Data Available No Data Available

No Data Available

UN Number Hazchem No Data Available **Pack Group** No Data Available No Data Available **Special Provision**

Land Transport (United States of America)

US DOT

Proper Shipping Name PROPYLENE GLYCOL

Class No Data Available Subsidiary Risk(s) No Data Available No Data Available **UN Number** No Data Available

Hazchem No Data Available **Pack Group** No Data Available **Special Provision** No Data Available

Sea Transport

IMDG Code

PROPYLENE GLYCOL **Proper Shipping Name**

Class No Data Available Subsidiary Risk(s) No Data Available **UN Number** No Data Available Hazchem No Data Available **Pack Group** No Data Available **Special Provision** No Data Available **EMS** No Data Available

Marine Pollutant No

Air Transport

IATA DGR

PROPYLENE GLYCOL **Proper Shipping Name** Class No Data Available

Subsidiary Risk(s)	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available

National Transport Commission (Australia)

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

Dangerous Goods ClassificationNOT 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 InformationNo Data AvailablePoisons Schedule (Aust)Not scheduled

Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

Approval Code Not Hazardous

National/Regional Inventories

Australia (AICS) Listed

Canada (DSL) Listed

Canada (NDSL) Not Determined

China (IECSC) Not Determined

Europe (EINECS) 200-338-0

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

USA (TSCA) Listed

16. OTHER INFORMATION

PRGLYC1003, PRGLYC1000, PRGLYC1001, PRGLYC1002, PRGLYC1003, PRGLYC1004, PRGLYC1005, **Related Product Codes** PRGLYC1009, PRGLYC1020, PRGLYC1100, PRGLYC1101, PRGLYC1200, PRGLYC1300, PRGLYC1700, PRGLYC1800, PRGLYC1801, PRGLYC1802, PRGLYC1803, PRGLYC1804, PRGLYC1805, PRGLYC1806, PRGLYC1807, PRGLYC1808, PRGLYC1809, PRGLYC1810, PRGLYC1811, PRGLYC1812, PRGLYC1813, PRGLYC1814, PRGLYC1815, PRGLYC1816, PRGLYC1817, PRGLYC1818, PRGLYC1819, PRGLYC1820, PRGLYC1821, PRGLYC1822, PRGLYC1823, PRGLYC1824, PRGLYC1825, PRGLYC1900, PRGLYC1950, PRGLYC2000, PRGLYC2600, PRGLYC2800, PRGLYC2900, PRGLYC3000, PRGLYC3001, PRGLYC3002, PRGLYC3010, PRGLYC3011, PRGLYC3020, PRGLYC3029, PRGLYC3030, PRGLYC3035, PRGLYC3036, PRGLYC3037, PRGLYC3038, PRGLYC3100, PRGLYC3101, PRGLYC3102, PRGLYC3200, PRGLYC3201, PRGLYC3202, PRGLYC3203, PRGLYC3300, PRGLYC3400, PRGLYC3500, PRGLYC3501, PRGLYC3800, PRGLYC4000, PRGLYC4001, PRGLYC4002, PRGLYC4003, PRGLYC4500, PRGLYC5000, PRGLYC5001, PRGLYC5002, PRGLYC5100, PRGLYC5200, PRGLYC5300, PRGLYC5400, PRGLYC6000, PRGLYC6001, PRGLYC6002, PRGLYC6100, PRGLYC7000, PRGLYC7001, PRGLYC7500, PRGLYC8000, PRGLYC8400, PRGLYC8401, PRGLYC8402, PRGLYC8403, PRGLYC8404, PRGLYC8405, PRGLYC8406, PRGLYC8407, PRGLYC8409, PRGLYC8409, PRGLYC8410, PRGLYC8411, PRGLYC8412, PRGLYC8413, PRGLYC8414, PRGLYC8415, PRGLYC8416, PRGLYC8417, PRGLYC8418, PRGLYC8419, PRGLYC8420, PRGLYC8421, PRGLYC8422, PRGLYC8423, PRGLYC8424, PRGLYC8425, PRGLYC8426, PRGLYC8500, PRGLYC8501, PRGLYC8502, PRGLYC8503, PRGLYC8504, PRGLYC8505, PRGLYC8506, PRGLYC8507, PRGLYC8508, PRGLYC8509, PRGLYC8510, PRGLYC8511, PRGLYC8512, PRGLYI0500, PRGLYI0600, PRGLYI0700, PRGLY10800, PRGLY10900, PRGLY11000, PRGLY11001, PRGLY11002, PRGLY11003, PRGLY11004, PRGLY11005, PRGLY11006, PRGLY11007, PRGLY11008, PRGLY11009, PRGLY11010, PRGLY11011, PRGLY11100, PRGLY11200, PRGLY11300, PRGLY11400, PRGLY11800, PRGLY11900, PRGLY12000, PRGLY12100, PRGLY13000, PRGLY13001, PRGLYI3002, PRGLYI6000, PRGLYI6030, PRGLYI7000, PRGLYI7001 Revision **Revision Date** 02 Feb 2016 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 **a** 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 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