

#### 1. IDENTIFICATION

**Product Name ISOHEXANE** 

**Other Names** Naphtha, petroleum, hydrotreated light

Uses Used in coatings, blowing agents, as a fuel, functional fluids, other consumer uses, laboratory activities, rubber

production and processing, mining chemicals, food extraction, cleaning agents.

**Chemical Family** No Data Available **Chemical Formula** Unspecified

**Chemical Name** Hydrocarbons, C6, isoalkanes, <5% n-hexane

**Product Description** A complex and variable combination of isoparaffinic hydrocarbons having mainly 6 atoms of carbon and boiling in the

range of approximately 48°C to 70°C.

#### 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	+60-3-5614-2111

# **Emergency Contact Details**

For emergencies only; DO NOT contact these companies for general product advice.

Sengalor, Malaysia

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



Auckland

Schedule 5

#### **Globally Harmonised System**

Hazard Classification Hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of

Chemicals (GHS)

Hazard Categories Flammable Liquids - Category 2

Specific Target Organ Toxicity (Single Exposure) - Category 3

Aspiration Hazard - Category 1

**Pictograms** 







Signal Word Danger

Hazard Statements AUH066 Repeated exposure may cause skin dryness or cracking

**H225** Highly flammable liquid and vapour.

**H304** May be fatal if swallowed and enters airways.

**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.

**P261** Avoid breathing mist/vapours/spray.

**P240** Ground and bond container and receiving equipment.

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

P242 Use non-sparking tools.

**P243** Take action to prevent static discharges.

**P280** Wear protective gloves/eye protection/face protection.

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

Response P370 + P378 In case of fire: Use carbon dioxide (CO2), dry chemical or foam for extinction.

**P301 + P310** IF SWALLOWED: Immediately call a POISON CENTER or doctor.

**P331** Do NOT induce vomiting.

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

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

vater [or shower]

P304 + P340 IF INHALED: Remove victim to fresh air and keep comfortable for breathing.

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)

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Hydrocarbons, C6, isoalkanes, <5% n-hexane	Unspecified	64742-49-0	100 %
Contains: n-Hexane	C6H14	110-54-3	<3 %

#### 4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

**Swallowed** IF SWALLOWED: Immediately call a Poison Centre or doctor/physician. Do NOT induce vomiting. Rinse mouth, then drink

plenty of water. 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.

Eve IF IN EYES: Immediately flush eyes with running water for several minutes, holding eyelids open and occasionally lifting

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

irritation persists, get medical advice/attention.

Skin IF ON SKIN: Remove contaminated clothing and shoes immediately. Flush skin with running water for several minutes;

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. Call a Poison Centre or

doctor/physician if respiratory symptoms persist or if you feel unwell. Apply resuscitation if victim is not breathing.

Administer oxygen if breathing is difficult.

**Advice to Doctor** Treat symptomatically. May be fatal if swallowed and enters airways - Medical survey during 48 hours. Ensure that

attending medical personnel are aware of identity and nature of product(s) involved, and take precautions to protect

themselves.

**Exposure** 

Medical Conditions Aggravated by Repeated exposure may cause skin dryness or cracking.

# **5. FIRE FIGHTING MEASURES**

**General Measures** If safe to do so, move undamaged containers from fire area. Cool container with water spray until well after fire is out.

Avoid getting water inside containers.

Flammability Conditions HIGHLY FLAMMABLE LIQUID: Low flashpoint - Will be easily ignited by heat, sparks or flames at ambient temperatures.

**Extinguishing Media** Use dry chemical, Carbon dioxide (CO2) or foam for extinction - Do not use a solid water stream (water jets) as it may

scatter and spread fire.

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

ignition and flash back; Many vapours are heavier than air and will collect in low or confined areas. Vapours from runoff

may create an explosion hazard. Containers may explode when heated.

**Hazardous Products of** 

Combustion

Fire (incomplete combustion and thermolysis) may produce irritating and/or toxic gases, including Carbon monoxide,

Carbon dioxide, various hydrocarbons, aldehydes and soot.

Contain runoff from fire control or dilution water - Runoff may pollute waterways; Vapours from runoff may create an **Special Fire Fighting Instructions** 

explosion hazard. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local

regulations.

**Personal Protective Equipment** Wear positive pressure self-contained breathing apparatus (SCBA) in combination with normal firefighting clothing (full

**Flash Point** <-35 °C [ASTM D 93]

**Lower Explosion Limit** 1.2 % **Upper Explosion Limit** 7.1%

>230 °C

**Auto Ignition Temperature** 

Hazchem Code 3YE

#### **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 in 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 spill with earth, sand or other non-combustible material. Use clean, non-sparking tools to collect material and

place it in suitable containers for later disposal (see SECTION 13).

**Containment** Stop leak if safe to do so – Prevent entry into waterways, drains or confined areas. Dike to collect large liquid spills.

**Decontamination** Following product recovery, flush area with water.

**Environmental Precautionary** 

Measures

 $Spillages\ and\ decontamination\ runoff\ should\ be\ prevented\ from\ entering\ drains\ and\ water courses\ -\ Local\ authorities$ 

should be advised if significant spillages cannot be contained.

Evacuation Criteria Spill or leak area should be isolated immediately. Evacuate non-essential personnel. Keep unauthorised personnel away.

Keep upwind and to higher ground.

**Personal Precautionary Measures** Use personal protective equipment as required (see SECTION 8). 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 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 and contact with eyes, skin and clothing. Do not ingest. Wear protective gloves/protective clothing/eye protection/face protection (see SECTION 8). Do not spray at high pressure (>3 bar); Do not use compressed air for filling, discharging or handling. To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded/bonded while moving the product; Do not allow splash loading, and ensure that the product is poured slowly, particularly at the beginning of operations. Handle away from heat (hot manifolds or casings) and any source of ignition - No smoking. Use explosion-proof electrical/ventilating/lighting

equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

\*Design installations (machinery and equipment) to prevent burning product from spreading (tanks, retention systems,

interceptors (traps) in drainage systems).

Storage Storage Store at room temperature in a cool, dry and well-ventilated place. Keep container tightly closed and properly labelled.

Store locked up. Keep away from heat and any source of ignition - No smoking. Keep away from incompatible materials (see SECTION 10). Keep in a bunded area - Storage installations should be designed with adequate bunds so as to

prevent ground or water pollution in case of leaks or spills.

\*Design the installations in order to avoid accidental emissions of product (e.g. due to seal breakage) onto hot casings or

electrical contacts.

**Container** Keep only in the original container or suitable container, e.g. Steel, Stainless-steel. Use only hydrocarbon-resistant

containers, seals, pipes, etc.

#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General No specific exposure standards are available for this product. For oil mist, refined mineral:

- Safe Work Australia Exposure Standard: TWA = 5 mg/m3.

COMPONENT: Hexane (CAS No. 110-54-3):

- Safe Work Australia Exposure Standard: TWA = 20 ppm (72 mg/m3).

**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.

\*Protective engineering solutions should be implemented and in use before personal protective equipment is considered.

**Personal Protection Equipment** 

- Respiratory protection: The use of breathing apparatus must comply strictly with the manufacturer's instructions and the regulations governing their choices and uses. Recommended: Type AX. When using a mask or half mask, Respirator with a vapour filter (refer to AS/NZS 1715 & 1716).

- Eye/face protection: Wear appropriate eye protection to avoid eye contact. Recommended: splashes are likely to occur, wear Safety glasses with side-shields.
- Hand protection: Wear protective gloves. Recommended: Impervious gloves, aliphatic hydrocarbon resistant. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.
- Skin/body protection: Wear appropriate personal protective clothing to avoid skin contact. Recommended: Antistatic boots; Wear fire/flame resistant/retardant clothing; Long sleeved clothing; Chemical resistant apron.
- \*These recommendations apply to the product as supplied. If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers.

**Special Hazards Precaustions** 

When working in confined spaces, ensure that there is a supply of air suitable for breathing and wear the recommended equipment. Apply technical measures to comply with occupational exposure limits.

**Work Hygienic Practices** 

When using, do not eat, drink or smoke. Wash hands before breaks and at the end of workday. Do not dry hands with rags that have been contaminated with product. Do not use abrasives, solvents or fuels. Regular cleaning of equipment, work area and clothing is recommended.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Liquid
Appearance Liquid

**Odour** Petroleum solvent

**Colour** Colourless

pH No Data Available

Vapour Pressure 280 hPa (@ 20 °C)

Relative Vapour Density No Data Available

Boiling Point 51 - 61 °C [ASTM D 1078]

Melting Point No Data Available

Freezing Point No Data Available

**Solubility** 0.0137 g/l - Insoluble in water

**Specific Gravity**No Data Available **Flash Point**<-35 °C [ASTM D 93]

Auto Ignition Temp >230 °C

**Evaporation Rate** 1 (EtEt = 1) [DIN 53170] **Bulk Density** No Data Available No Data Available **Corrosion Rate Decomposition Temperature** No Data Available Density 660 kg/m3 [ISO 12185] **Specific Heat** No Data Available **Molecular Weight** No Data Available **Net Propellant Weight** No Data Available **Octanol Water Coefficient** Log Pow = 3.6**Particle Size** No Data Available

**Partition Coefficient** No Data Available **Saturated Vapour Concentration** No Data Available Vapour Temperature No Data Available 0.45 mm2/s (@ 20 °C) Viscosity **Volatile Percent** No Data Available **VOC Volume** No Data Available

**Additional Characteristics** Surface tension: 0.0191 N/m @ 25 °C [EN 14370].

**Potential for Dust Explosion** Not applicable.

**Fast or Intensely Burning** 

Characteristics

Risk of violent reaction or explosion!

Flame Propagation or Burning

Rate of Solid Materials

No information available.

No information available.

**Non-Flammables That Could** Contribute Unusual Hazards to a

Fire

**Properties That May Initiate or** Contribute to Fire Intensity

**Reactions That Release Gases or Vapours** 

Release of Invisible Flammable

Vapours and Gases

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

Incomplete combustion and thermolysis) may produce irritating and/or toxic gases, including Carbon monoxide, Carbon dioxide, various hydrocarbons, aldehydes and soot.

Vapours will form explosive mixtures with air.

# 10. STABILITY AND REACTIVITY

General Information No reactivity/possibility of hazardous reactions under normal processing.

**Chemical Stability** Stable under recommended storage conditions.

**Conditions to Avoid** Keep away from heat and any source of ignition. Take precautionary measures against static discharge. Avoid heating in

**Materials to Avoid** Incompatible/reactive with oxidising agents, strong acids.

**Hazardous Decomposition** 

**Products** 

Incomplete combustion and thermolysis may produce irritating and/or toxic gases, including Carbon monoxide, Carbon

dioxide, various hydrocarbons, aldehydes and soot.

**Hazardous Polymerisation** No information available.

#### 11. TOXICOLOGICAL INFORMATION

#### **General Information**

- Acute toxicity: Not classified. Ingestion may cause abdominal pain, gastrointestinal irritation, nausea, vomiting and diarrhea. May cause central nervous system depression. Inhalation may cause nausea, loss of consciousness, eye irritation.
- Skin corrosion/irritation: Not classified. Repeated exposure may cause skin dryness or cracking.
- \*Frequent or prolonged skin contact destroys the lipoacid-cutaneous layer and may cause dermatitis.
- Eye damage/irritation: Not classified. May cause burning feeling and temporary redness.
- Respiratory/skin sensitisation: Not classified as a sensitiser.
- Germ cell mutagenicity: Negative (genetic toxicity); The mutagenic potential of the substance has been extensively studied in a range of in-vivo and in-vitro assays.
- Carcinogenicity: This product is not classified as carcinogenic.
- Reproductive toxicity: Study in rats with the substance did not show any effects on reproductive performance. Results of quideline developmental toxicity studies on the substance and OECD developmental toxicity screening studies showed no evidence of developmental toxicity in rats.
- STOT (ingle exposure): Vapors may cause drowsiness and dizziness. Vapors inhaled in strong concentration have a narcotic effect on the central nervous system. The inhalation of vapours or aerosols may be irritating for the respiratory tract and for mucous membranes.

- STOT (repeated exposure): Not classified.

- Aspiration toxicity: May be fatal if swallowed and enters airways. If swallowed accidentally, the product may enter the lungs due to its low viscosity and lead to the rapid development of very serious pulmonary lesions. The fluid can enter the

lungs and cause damage (chemical pneumonitis, potentially fatal).

Acute

**Ingestion** Acute toxicity (Oral):

COMPONENT: Hydrocarbons, C6, isoalkanes, <5% n-hexane:

- LD50, Rat: >16,750 mg/kg bw [OECD 401].

Other Acute toxicity (Dermal):

- LD50, Rabbit: >3,350 mg/kg bw [OECD 402].

**Inhalation** Acute toxicity (Inhalation - Vapours):

- LC50, Rat: 259,354 mg/m3 (4 h) [OECD 403].

Carcinogen Category None

#### 12. ECOLOGICAL INFORMATION

**Ecotoxicity** Acute aquatic toxicity:

COMPONENT: Hydrocarbons, C6, isoalkanes, <5% n-hexane:
- LL50, Fish (Oncorhynchus mykiss): 18.3 mg/L (96 h) [QSAR Petrotox].
- EL50, Crustacea (Daphnia magna): 31.9 mg/L (48 h) [QSAR Petrotox].

- ErL50, Algae (Pseudokirchneriella subcapitata): 13.6 mg/L (72 h) [QSAR Petrotox].

Chronic aquatic toxicity:

COMPONENT: Hydrocarbons, C6, isoalkanes, <5% n-hexane:

NOELR, Fish (Oncorhynchus mykiss): 4.09 mg/L (28 d) [QSAR Petrotox].
 NOELR, Crustacea (Daphnia magna): 7.14 mg/L (21 d) [QSAR Petrotox].

- NOELR, Algae (Pseudokirchneriella subcapitata, growth rate): 3.0 mg/L (72 h) [QSAR Petrotox].

Persistence/Degradability Readily biodegradable (98 %, 28 days) [OECD 301 F].

**Mobility** Given its physical and chemical characteristics, the product generally shows low soil mobility. The product evaporates

readily (air); The product is insoluble and floats on water.

**Environmental Fate** Should not be released into the environment. The product should not be allowed to enter drains, water courses or the

soil.

**Bioaccumulation Potential** COMPONENT: Hydrocarbons, C6, isoalkanes, <5% n-hexane:

- log Pow: 3.6

- Bioconcentration factor (BCF): 501 (Product).

**Environmental Impact** No Data Available

#### 13. DISPOSAL CONSIDERATIONS

**General Information** If recycling is not practicable, dispose of waste from residues/unused product in accordance with local/regional/national

regulations.

Special Precautions for Land Fill Contaminated packaging: Empty containers may contain flammable or explosive vapours. Empty containers should be

taken to an approved waste handling site for recycling or disposal.

#### 14. TRANSPORT INFORMATION

#### Land Transport (Australia)

ADG Code

Proper Shipping Name HEXANES

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

**EPG** 14 Liquids - Highly Flammable

 UN Number
 1208

 Hazchem
 3YE

 Pack Group
 II

Special Provision No Data Available

# Land Transport (Malaysia)

ADR Code

Proper Shipping Name HEXANES

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

**EPG** 14 Liquids - Highly Flammable

UN Number 1208
Hazchem 3YE
Pack Group II

**Special Provision** No Data Available

# Land Transport (New Zealand)

NZS5433

Proper Shipping Name HEXANES

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

**EPG** 14 Liquids - Highly Flammable

 UN Number
 1208

 Hazchem
 3YE

 Pack Group
 II

**Special Provision** No Data Available

# **Land Transport (United States of America)**

**US DOT** 

Proper Shipping Name HEXANES

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

ERG 128 Flammable Liquids (Non-Polar / Water-Immiscible)

UN Number 1208
Hazchem 3YE
Pack Group II

**Special Provision** No Data Available

#### Sea Transport

IMDG Code

Proper Shipping Name HEXANES

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

UN Number 1208

Hazchem 3YE Pack Group II

**Special Provision** No Data Available

EMS F-E, S-D Marine Pollutant Yes

Air Transport IATA DGR

Proper Shipping Name HEXANES

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

 UN Number
 1208

 Hazchem
 3YE

 Pack Group
 II

**Special Provision** No Data Available

#### **National Transport Commission (Australia)**

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

Dangerous Goods Classification Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by

Road & Rail (ADG Code)

# 15. REGULATORY INFORMATION

General Information HYDROCARBONS, LIQUID

Poisons Schedule (Aust) Schedule 5

# **Environmental Protection Authority (New Zealand)**

Hazardous Substances and New Organisms Amendment Act 2015

Approval Code Not Assessed

# **National/Regional Inventories**

Australia (AIIC) Listed

Canada (DSL) Not Determined

Canada (NDSL) Not Determined

China (IECSC) Not Determined

**Europe (EINECS)** 931-254-9

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 ISOHEX1000, ISOHEX1001, ISOHEX1002, ISOHEX1003, ISOHEX1004, ISOHEX1005, ISOHEX1006, ISOHEX1007,

ISOHEX1008, ISOHEX1100, ISOHEX2000, ISOHEX3000, ISOHEX3010, ISOHEX3011, ISOHEX3012, ISOHEX3020, ISOHEX3030, ISOHEX3040, ISOHEX3050, ISOHEX3051, ISOHEX3060, ISOHEX3061, ISOHEX3062, ISOHEX3065, ISOHEX3066, ISOHEX3068, ISOHEX3069, ISOHEX3070, ISOHEX3071, ISOHEX3080, ISOHEX3081, ISOHEX3090, ISOHEX3091, ISOHEX3100, ISOHEX3500, ISOHEX4500, ISOHEX4500, ISOHEX4600, ISOHEX5000, ISOHEX7000,

ISOHEZ5000

Revision 3

**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
inH20 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

mmH20 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