

#### 1. IDENTIFICATION

Product Name Mixed Xylenes

Other Names Xylene [CAS#1330-20-7]; Xylenes; Xylol

**Use** Use as a refinery feedstock, fuel, or for use in engineered processes.

\*Use in other applications may result in higher exposures and require additional controls, such as local exhaust ventilation

and personal protective equipment.

Chemical Family No Data Available

Chemical Formula C8H10

Chemical Name Benzene, dimethyl-, mixed isomers

Product Description No Data Available

### Contact Details of the Supplier of this Safety Data Sheet

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Seksyen 33, Shah Alam Premier Industrial Park

40400 Shah Alam Sengalor, Malaysia

## **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 1800-127406 Chemcall Australia +64-4-9179888 Chemcall +64-4-9179888 Malaysia 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 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 3

Acute Toxicity (Dermal) - Category 4 Acute Toxicity (Inhalation) - Category 4 Skin Corrosion/Irritation - Category 2

Specific Target Organ Toxicity (Single Exposure) - Category 3

Specific Target Organ Toxicity (Repeated Exposure) - Category 2

Aspiration Hazard - Category 1

**Pictograms** 







Signal Word Danger

Hazard Statements H226 Flammable liquid and vapour.

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

H312 Harmful in contact with skin.
H315 Causes skin irritation.
H332 Harmful if inhaled.

**H335** May cause respiratory irritation.

**H373** May cause damage to organs (Auditory system) through prolonged or repeated

exposure if inhaled.

Precautionary StatementsPreventionP210Keep away from heat/sparks/open flames/hot surfaces. No smoking.

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

**P233** Keep container tightly closed.

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

P260 Do not breathe mist/vapour/spray.

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

extinction.

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

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

**P332 + P313** If skin irritation occurs: Get medical advice.

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

water or shower.

**P363** Wash contaminated clothing before reuse.

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

**P331** Do NOT induce vomiting.

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 Hazards	3.1C	Flammable liquid - medium hazard
	Health Hazards	6.1D	Substances that are acutely toxic - Harmful
		6.3A	Substances that are irritating to the skin
		6.4A	Substances that are irritating to the eye
		6.8B	Substances that are suspected human reproductive or developmental toxicants
		6.9B	Substances that are harmful to human target organs or systems

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

## Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Ethylbenzene	C8H10	100-41-4	64 %
Xylene (o, m, p-isomers)	C8H10	1330-20-7	36 %

### 4. FIRST AID MEASURES

## Description of necessary measures according to routes of exposure

**Swallowed** IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a Poison Centre or doctor/physician for advice. If

vomiting occurs spontaneously, keep head below hips to prevent aspiration. Transport to nearest medical facility for

additional treatment.

**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 rinsing for at least 15 minutes.

Transport to nearest medical facility for additional treatment.

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

Skin IF ON SKIN (or hair): Remove and isolate contaminated clothing and shoes. Immediately flush skin and hair with running

water for at least 15 minutes; Wash skin with soap and water. If skin irritation occurs, get medical advice/attention. Wash

contaminated clothing and shoes before reuse.

\*In case of burns, immediately cool affected skin for as long as possible with cold water. Do not remove clothing if

adhering to skin.

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 for advice. Give artificial respiration if victim is not breathing. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Administer oxygen if breathing is difficult. If rapid recovery does not

occur, transport to nearest medical facility for additional treatment.

**Advice to Doctor** 

Treat symptomatically. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. Keep victim calm and warm. Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.

\*In case of ingestion, gastric lavage with activated charcoal can be used promptly to prevent absorption. Consideration should be given to the use of an intratracheal tube, to prevent aspiration. Irregular heart beat may occur; use of adrenalin is not advisable. Individual intoxicated by the product should be hospitalised immediately, with acute and continuing attention to neurological and cardiopulmonary function. Positive pressure ventilation may be necessary. After the initial episode, individuals should be monitored for changes in blood variables and the delayed appearance of pulmonary edema and chemical pneumonitis. Such patients should be monitored for several days or weeks for delayed effects. Individuals with chronic pulmonary disease will be more seriously

impaired, and recovery from inhalation exposure may be complicated. In case of skin injection, prompt debridement of the wound is necessary to minimise necrosis and tissue loss.

Medical Conditions Aggravated by No information available.

**Exposure** 

## 5. FIRE FIGHTING MEASURES

**General Measures** Move containers from fire area if you can do it without risk. Cool containers with water spray until well after fire is out.

> Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. ALWAYS stay away from tanks engulfed in fire. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn. \*If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters in all directions; also, consider initial evacuation

for 800 meters in all directions.

**Flammability Conditions** FLAMMABLE LIQUID & VAPOUR: Will be easily ignited by heat, sparks or flames.

**Extinguishing Media** Use dry chemical, Carbon dioxide (CO2), foam or water spray for extinction - Do not use straight streams.

\*CAUTION: This product has a very low flash point: Use of water spray when fighting fire may be inefficient.

Fire and Explosion Hazard Risk of violent reaction or explosion! Vapours may form explosive mixtures with air. Vapours may travel to source of ignition and flash back. Most vapors are heavier than air. They will spread along ground and collect in low or confined

areas. Vapour explosion hazard indoors, outdoors or in sewers. Containers may explode when heated. Many liquids are

lighter than water.

**Hazardous Products of** 

Combustion

Fire will produce irritating, corrosive and/or toxic gases, including Carbon oxides (CO, CO2).

**Special Fire Fighting Instructions** Contain runoff from fire control or dilution water - Runoff may cause pollution. Runoff to sewer may create fire or

explosion hazard!

Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only **Personal Protective Equipment** 

provide limited protection.

**Flash Point** 26.85 - 31.85 °C [Closed cup]

**Lower Explosion Limit** 1.0 % **Upper Explosion Limit** 7.0 %

**Auto Ignition Temperature** 463.3 - 528.9 °C

**Hazchem Code** 37

## **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. Do not breathe mist/vapours and avoid contact with eyes, skin and clothing.

**Clean Up Procedures** Transfer small spillage by mechanical means to a labelled, sealable container for product recovery or safe disposal.

> Transfer large spillage by mechanical means, such as vacuum truck, to a salvage tank for recovery or safe disposal. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely (see SECTION 13).

\*Use clean, non-sparking tools to collect absorbed material.

Containment Stop leak if you can do it without risk. Prevent entry into waterways, sewers, basements or confined areas. Dike far

ahead of large spill for later disposal.

\*Vapour-suppressing foam may be used to reduce vapours. Water spray may reduce vapour, but may not prevent ignition

in closed spaces.

**Decontamination** Do not flush away residues with water. Retain as contaminated waste.

**Environmental Precautionary** 

Measures

Spillages and decontamination runoff should be prevented from entering drains and watercourses. Local authorities

should be advised if significant spillages cannot be contained.

**Evacuation Criteria** Spill or leak area should be isolated immediately. Keep unauthorised personnel away. Keep upwind and to higher

ground.

\*Large Spill: Consider initial downwind evacuation for at least 300 meters.

**Personal Precautionary Measures** 

Wear suitable protective equipment (see SECTION 8).

\*For emergency responders: Use solvent-resistant protective clothing. Use respirator with AX filter or self-contained

breathing apparatus.

#### 7. HANDLING AND STORAGE

Handling Safety showers and eyewash facilities should be provided within the immediate work area for emergency use. Ensure

adequate ventilation - Use only outdoors or in a well-ventilated area. Handle in accordance with good industrial hygiene and safety practice. Do not breathe mist/vapours and avoid contact with eyes, skin and clothing. Do not ingest. Wear protective gloves/protective clothing/eye protection/face protection (see SECTION 8). FLAMMABLE LIQUID & VAPOUR: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources - No smoking. Ground and bond container and receiving equipment. Use explosion-proof equipment and non-sparking tools. Take action to prevent static

discharges. Avoid splash filling. Do not use compressed air for filling, discharging, or handling operations.

Storage Store in a cool, dry and well-ventilated place, protected from sunlight. Keep container tightly closed. Keep away from

heat, hot surfaces, sparks, open flames and other ignition sources - No smoking. Keep away from foodstuffs and

incompatible materials (see SECTION 10). Store locked up.

\*Locate bulk storage outdoors. Bulk storage tanks should be diked (bunded).

**Container** Keep in the original container. Empty containers retain product residue and can be hazardous; Do not reuse container.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**General** No specific workplace exposure standard is available for this product. For Xylene (o-, m-, p-isomers):

- Safe Work Australia Exposure Standard: TWA = 80 ppm (350 mg/m3); STEL = 150 ppm (655 mg/m3).

- New Zealand Workplace Exposure Standard: TWA = 50 ppm (217 mg/m3); Ototoxin (oto).

COMPONENT: Ethylbenzene (CAS No. 100-41-4):

- Safe Work Australia Exposure Standard [Next review 2023]: TWA = 100 ppm (434 mg/m3); STEL = 125 ppm (543 mg/m3).

- New Zealand Workplace Exposure Standard [Adopted 2022]: TWA = 20 ppm (88 mg/m3); STEL = 40 ppm (176 mg/m3);

Skin absorption (skin); Ototoxin (oto).

**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/ventilating/lighting equipment.

Personal Protection Equipment

- Respiratory protection: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Recommended: Use respirator with AX

filter or self-contained breathing apparatus.

- Eye/face protection: Wear appropriate eye protection to prevent eye contact. Recommended: Chemical splash goggles.

- Hand protection: Wear protective gloves. Recommended: Use butyl-rubber gloves. Always seek advice from glove

suppliers.

- Skin/body protection: Wear appropriate personal protective clothing to prevent skin contact. Recommended: Use protective clothing which is chemical-resistant to this material; Safety shoes and boots should also be chemical-resistant.

**Special Hazards Precaustions** 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 it before reuse.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical State** Liquid **Appearance** Clear liquid

Odour Characteristic, aromatic

Colour Colourless

No Data Available Ηα No Data Available **Vapour Pressure** 

**Relative Vapour Density**  $3.7 \, Air = 1$ **Boiling Point** 138.85 °C

**Melting Point** No Data Available

**Freezing Point** -26.15 °C

Solubility Very slightly soluble in cold water

0.861 **Specific Gravity** 

**Flash Point** 26.85 - 31.85 °C [Closed cup]

**Auto Ignition Temp** 463.3 - 528.9 °C **Evaporation Rate** 0.77 (n-BuAc = 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 No Data Available **Molecular Weight 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 No Data Available

No Data Available **Additional Characteristics** Vapour explosion hazard indoors, outdoors or in sewers.

No Data Available

No Data Available

**Potential for Dust Explosion** Not applicable.

**Fast or Intensely Burning** 

Vapour Temperature

**Volatile Percent** 

**VOC Volume** 

Viscosity

Characteristics

Risk of violent reaction or explosion!

Flame Propagation or Burning No information available. **Rate of Solid Materials** 

**Non-Flammables That Could** Contribute Unusual Hazards to a No information available.

**Properties That May Initiate or** 

Contribute to Fire Intensity

FLAMMABLE LIQUID & VAPOUR: Will be easily ignited by heat, sparks or flames.

**Reactions That Release Gases or** 

**Vapours** 

Fire

Fire/decomposition will produce irritating, corrosive and/or toxic gases, including Carbon oxides (CO, CO2).

Release of Invisible Flammable Vapours and Gases

Vapours may form explosive mixtures with air.

#### 10. STABILITY AND REACTIVITY

**General Information** No information available.

**Chemical Stability** Stable under normal conditions of use.

Conditions to Avoid Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Take action to prevent static

discharges.

Materials to Avoid Incompatible/reactive with oxidising agents, reducing agents, acids, alkalis.

**Hazardous Decomposition** 

Due de ete

**Products** 

Fire/decomposition will produce irritating, corrosive and/or toxic gases, including Carbon oxides (CO, CO2).

**Hazardous Polymerisation** Hazardous polymerisation will not occur.

#### 11. TOXICOLOGICAL INFORMATION

#### General Information

- Acute toxicity: Low acute oral toxicity. Harmful in contact with skin and if inhaled. Effects consistent with central nervous system depression; neurotoxic effects have been reported. Death may occur following exposure to very high concentrations.
- Skin corrosion/irritation: Causes skin irritation, particularly with prolonged or frequent contact.
- Eye damage/irritation: May cause eye irritation, but will not injure eye tissue.
- Respiratory/skin sensitisation: Xylenes are not considered to be skin sensitisers; Ethylbenzene is not a skin sensitiser.
- Germ cell mutagenicity: Xylenes are not considered genotoxic; Ethylbenzene is not considered genotoxic.
- Carcinogenicity: Xylenes (CAS No. 1330-20-7) are classified by the IARC Monographs in Group 3, Not classifiable as to its carcinogenicity to humans. Ethyl benzene (CAS No. 100-41-4) is classified by the IARC Monographs in Group 2B, Possibly carcinogenic to humans; However, based on inadequate evidence in humans, the chemical is not considered a carcinogen.
- Reproductive toxicity: Not considered to cause reproductive toxicity.
- STOT (single exposure): May cause respiratory irritation. Neurobehavioural effects (including dizziness and impairment in reaction time) and respiratory irritation have been observed in humans following exposure to low concentrations of xylenes (50 400 ppm) or chronic exposure to vapours of mixed xylenes (14 ppm TWA).
- STOT (repeated exposure): May cause damage to the hearing organs through prolonged or repeated exposure (Ethylbenzene). At higher concentrations, xylenes have the potential to cause systemic long-term effects including developmental toxicity and ototoxicity.
- Aspiration toxicity: May be fatal if swallowed and enters airways.

Acute

**Ingestion** Acute toxicity (Oral):

COMPONENT: Mixed xylenes (CAS No. 1330-20-7):

- LD50, Rats: >2,000 mg/kg bw.

- LDLo, Human: 50 mg/kg [Supplier's SDS]. COMPONENT: Ethyl benzene (CAS No. 100-41-4):

- LD50, Rats: 3,500 mg/kg bw.

Carcinogen Category None

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity** Acute toxicity:

- LC/EC/IC50, Fish: <=10 mg/L - LC/EC/IC50, Crustacea: <=10 mg/L - LC/EC/IC50, Algae: <=10 mg/L

Chronic toxicity: No information available.

Persistence/Degradability Oxidises rapidly by photochemical reactions in air. Readily biodegradable.

Mobility If product enters soil, it will be highly mobile and may contaminate groundwater. Floats on water.

**Environmental Fate** In view of the high rate of loss from solution, the product is unlikely to pose a significant hazard to aquatic life; However,

discharge into the environment must be avoided - Prevent entry into soils, drains and waterways.

**Bioaccumulation Potential** No information available.

**Environmental Impact** No Data Available

## 13. DISPOSAL CONSIDERATIONS

**General Information** Recover or recycle if possible. Dispose of waste material as hazardous waste, through a licensed professional disposal

service and in accordance with local/regional/national regulations. Do not dispose together with household waste. Do not

dispose into the environment; Do not release to sewers, drains or watercourses.

Special Precautions for Land Fill Container disposal: Drain container thoroughly. After draining, vent in a safe place away from sparks and fire. Do not

puncture, cut or weld unclean drums. Dispose of as hazardous waste, through a licensed professional waste disposal service and in accordance with local/regional/national regulations. Do not dispose together with household waste.

## 14. TRANSPORT INFORMATION

## Land Transport (Australia)

ADG Code

Proper Shipping Name XYLENES

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

**EPG** 16 Liquids - Highly Flammable, Toxic

 UN Number
 1307

 Hazchem
 3Y

 Pack Group
 III

Special Provision No Data Available

## Land Transport (Malaysia)

ADR Code

Proper Shipping Name XYLENES

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

**EPG** 16 Liquids - Highly Flammable, Toxic

 UN Number
 1307

 Hazchem
 3Y

 Pack Group
 III

Special Provision No Data Available

## Land Transport (New Zealand)

NZS5433

Proper Shipping Name XYLENES

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

**EPG** 16 Liquids - Highly Flammable, Toxic

UN Number 1307
Hazchem 3Y
Pack Group III

Special Provision No Data Available

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

**US DOT** 

Proper Shipping Name XYLENES

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

ERG 130 Flammable Liquids (Non-Polar / Water-Immiscible / Noxious)

UN Number 1307 Hazchem 3Y Pack Group III

**Special Provision** No Data Available

## **Sea Transport**

IMDG Code

Proper Shipping Name XYLENES

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

 UN Number
 1307

 Hazchem
 3Y

 Pack Group
 III

**Special Provision** No Data Available

EMS F-E, S-D Marine Pollutant No

## **Air Transport**

IATA DGR

Proper Shipping Name XYLENES

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

 UN Number
 1307

 Hazchem
 3Y

 Pack Group
 III

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 HSR000983 (Reissued)

## **National/Regional Inventories**

Australia (AIIC) Listed

Canada (DSL) Not Determined

Canada (NDSL) Not Determined

China (IECSC) Not Determined

**Europe (EINECS)** 215-535-7

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** XYLENE0700, XYLENE0701, XYLENE0702, XYLENE0705, XYLENE0710

Revision 2

**AICS** Australian Inventory of Chemical Substances

atm Atmosphere

**CAS** Chemical Abstracts Service (Registry Number)

cm<sup>2</sup> 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/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