



SAFETY DATA SHEET TOLUENE REVISION 5, DATE 04 NOV 21

1. IDENTIFICATION

Product Name	Toluene
Other Names	Methacide; Methylbenzene; Phenylmethane; Toluol
Uses	Solvent; cleaning agent; fuel additive; component of gasoline; in paints, coatings, adhesives, inks; degreasers; intermediate.
Chemical Family	No Data Available
Chemical Formula	C ₇ H ₈
Chemical Name	Benzene, methyl-
Product Description	No Data Available

Contact Details of the Supplier of this Safety Data Sheet

Organisation	Location	Telephone
Redox Ltd	2 Swettenham Road Minto NSW 2566 Australia	+61-2-97333000
Redox Ltd	11 Mayo Road Wiri Auckland 2104 New Zealand	+64-9-2506222
Redox Inc.	3960 Paramount Boulevard Suite 107 Lakewood CA 90712 USA	+1-424-675-3200
Redox Chemicals Sdn Bhd	Level 2, No. 8, Jalan Sapir 33/7 Seksyen 33, Shah Alam Premier Industrial Park 40400 Shah Alam Sengalor, Malaysia	+60-3-5614-2111

Emergency Contact Details

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

Organisation	Location	Telephone
Poisons Information Centre	Westmead NSW	1800-251525 131126
Chemcall	Australia	1800-127406 +64-4-9179888
Chemcall	Malaysia	+64-4-9179888
Chemcall	New Zealand	0800-243622 +64-4-9179888
National Poisons Centre	New Zealand	0800-764766
CHEMTREC	USA & Canada	1-800-424-9300 CN723420 +1-703-527-3887

2. HAZARD IDENTIFICATION

Poisons Schedule (Aust)

Schedule 6

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

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Australia
Adelaide
Brisbane
Melbourne
Perth
Sydney

New Zealand
Auckland
Christchurch
Hawke's Bay
UK
London

Malaysia
Kuala Lumpur
USA
Los Angeles
Oakland
Mexico
Saltillo



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 Skin Corrosion/Irritation - Category 2 Toxic To Reproduction - Category 1A 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		H225 Highly flammable liquid and vapour. H304 May be fatal if swallowed and enters airways. H315 Causes skin irritation. H336 May cause drowsiness or dizziness. H360FD May damage fertility. May damage the unborn child. H373 May cause damage to organs through prolonged or repeated inhalation exposure.
Precautionary Statements	Prevention	P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking. P201 Obtain special instructions before use. P280 Wear protective gloves/protective clothing/eye protection/face protection. P260 Do not breathe mist/vapour/spray. 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.
	Response	P271 Use only outdoors or in a well-ventilated area. P370 + P378 In case of fire: Use carbon dioxide (CO2), dry chemical or foam for extinction. Normal foam, i.e. protein based foam that is not alcohol-resistant, is the preferred medium for large fires. P308 + P313 IF exposed or concerned: Get medical attention. P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor. P331 Do NOT induce vomiting. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. P312 Call a POISON CENTER or doctor if you feel unwell. P391 Collect spillage. P332 + P313 If skin irritation occurs: Get medical attention. P362 Take off contaminated clothing. 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.

Disposal	P405	Store locked up.
	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	3.1B	Flammable liquid - high 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
Toluene	C7H8	108-88-3	<=100 %

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, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Never give anything by mouth to an unconscious person.
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. If eye irritation persists, get medical advice/attention.
Skin	IF ON SKIN (or hair): Remove contaminated clothing and shoes immediately. Flush skin and hair with running water for at least 15 minutes. In case of gross contamination, drench contaminated clothing and skin with plenty of water before removing clothes. 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 for advice. Apply resuscitation if victim is not breathing - Do not use direct mouth-to-mouth method if victim ingested or inhaled the substance; use alternative respiratory method or proper respiratory device - Administer oxygen if breathing is difficult.
Advice to Doctor	Keep victim calm and warm - Obtain immediate medical care. Depending on the degree of exposure, periodic medical examination is suggested. 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	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. *Large fire: Fight fire from maximum distance or use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn. ALWAYS stay away from tanks engulfed in fire. Effects may spread beyond the immediate vicinity. All non-essential personnel should be instructed to move at least 250 metres away from the incident.
Flammability Conditions	HIGHLY FLAMMABLE LIQUID & VAPOUR: Will be easily ignited by heat, sparks or flame.
Extinguishing Media	Use dry chemical, Carbon dioxide (CO ₂), normal foam (i.e. protein based foam that is not alcohol-resistant) 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 vapours are heavier than air; They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapour explosion hazard indoors, outdoors or in sewers. Heating can cause expansion or decomposition leading to violent rupture of containers. Many liquids are lighter than water. *Public Safety Hazard: There may be a public safety hazard outside the immediate area of the incident. People should be warned to stay indoors with all doors and windows closed, preferably in rooms upstairs and facing away from the incident. Ignition sources should be eliminated and any ventilation stopped.
Hazardous Products of Combustion	Combustion or thermal/oxidative degradation will produce irritating and/or toxic gases, including oxides of Carbon and Nitrogen, smoke and other organic compounds.
Special Fire Fighting Instructions	Contain runoff from fire control or dilution water - Runoff may cause pollution. Vapours from runoff may create an explosion hazard.
Personal Protective Equipment	Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection.
Flash Point	4 °C [Abel]
Lower Explosion Limit	1.2 %
Upper Explosion Limit	7.1 %
Auto Ignition Temperature	480 - 536 °C
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 flames in immediate area). All equipment used when handling the product must be grounded. Do not touch or walk through spilled material - Slippery when spilt. Avoid accidents, clean up immediately! Do not breathe vapours and avoid contact with eyes, skin and clothing.
Clean Up Procedures	Absorb or cover with dry earth, sand or other non-combustible material. Use clean, non-sparking tools to collect absorbed material and transfer to containers for disposal (see SECTION 13). Wipe up small spills with absorbent (clean rag or paper towels). Collect and seal in properly labelled containers.
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. *A vapour-suppressing foam may be used to reduce vapours. Water spray may reduce vapour, but may not prevent ignition in closed spaces.
Decontamination	After spills, wash area preventing runoff from entering drains.
Environmental Precautionary Measures	Spillages and decontamination runoff should be prevented from entering drains and watercourses. If contamination of crops, sewers or waterways has occurred advise local emergency services.
Evacuation Criteria	Spill or leak area should be isolated immediately. Keep unprotected/unauthorised personnel away. Keep upwind and to higher ground.

*Large spill: Immediately contact Police or Fire Brigade; Consider initial downwind evacuation of areas within at least 300 m.

Personal Precautionary Measures Wear protective equipment to prevent skin and eye contamination and the inhalation of vapours (see SECTION 8).

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. Obtain special instructions before use - Do not handle until all safety precautions have been read and understood. Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Do not breathe mist/vapours/spray and avoid contact with eyes, skin and clothing. Do not ingest. Wear protective gloves/protective clothing/eye protection/face protection (see SECTION 8). HIGHLY FLAMMABLE LIQUID & VAPOUR: Keep away from heat, hot surfaces, sparks, open flames and sources of ignition - No smoking. Ground/bond container and receiving equipment. Use explosion-proof equipment and non-sparking tools. Take action to prevent static discharge. Do not use compressed air for filling, discharging or handling. Avoid release to the environment.
Storage	Store in a cool, dry and well-ventilated place, out of direct sunlight. Keep container standing upright and tightly closed when not in use - Check regularly for leaks. Keep cool. Keep away from heat, hot surfaces, sparks, open flames and sources of ignition - No smoking. Keep away from food/feedstuffs and incompatible materials (see SECTION 10). Store locked up.
Container	Keep in the original container.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General	For Toluene (CAS No. 108-88-3): - Safe Work Australia Exposure Standard: TWA = 50 ppm (191 mg/m ³); STEL = 150 ppm (574 mg/m ³); Absorption through the skin may be a significant source of exposure (Sk). - New Zealand Workplace Exposure Standard [Adopted 2022]: TWA = 20 ppm (75 mg/m ³); STEL = 100 ppm (377 mg/m ³); Skin absorption (skin); Ototoxin (oto); Exposure can also be estimated by biological monitoring (bio). - OSHA PEL: TWA = 200 ppm; Ceiling = 300 ppm; 500 ppm (10-minute maximum peak). - NIOSH REL: TWA = 100 ppm (375 mg/m ³); ST = 150 ppm (560 mg/m ³). - Immediately dangerous to life or health (IDLH) concentration: 500 ppm.
Exposure Limits	No Data Available
Biological Limits	BEI values (WorkSafe NZ): - Exposure: Toluene - Toluene in urine or o-Cresol in urine (following hydrolysis) - Sampling time: End of exposure or end of shift - BEI: 0.03 mg/litre or 0.3 mg/g creatinine
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 with local exhaust ventilation or while wearing appropriate respirator. Recommended: Organic vapour/particulate respirator (refer to AS/NZS 1715 & 1716). - Eye/face protection: Wear appropriate eye protection to avoid eye contact. Recommended: Primary eye protection such as protective glasses or goggles, with secondary protection face-shield. - Hand protection: Wear protective gloves. Recommended: Chemical-resistant gloves; gloves made from nitrile should be suitable for intermittent contact. - Skin/body protection: Wear appropriate personal protective clothing to avoid skin contact. Recommended: Chemical-resistant protective clothing, e.g. overalls, safety shoes.
Special Hazards Precautions	No information available.
Work Hygienic Practices	Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Appearance	Clear liquid
Odour	Aromatic
Colour	Colourless
pH	No Data Available
Vapour Pressure	3 - 3.5 kPa (@ 20 °C)
Relative Vapour Density	3.1 Air = 1
Boiling Point	110 - 111 °C
Melting Point	-95 °C (typical)
Freezing Point	No Data Available
Solubility	0.515 kg/m3 in water
Specific Gravity	0.87 (Water = 1)
Flash Point	4 °C [Abel]
Auto Ignition Temp	480 - 536 °C
Evaporation Rate	6.1 (diethyl ether = 1)
Bulk Density	No Data Available
Corrosion Rate	No Data Available
Decomposition Temperature	No Data Available
Density	870 kg/m3 (typical)
Specific Heat	No Data Available
Molecular Weight	92 g/mol
Net Propellant Weight	No Data Available
Octanol Water Coefficient	No Data Available
Particle Size	No Data Available
Partition Coefficient	No Data Available
Saturated Vapour Concentration	No Data Available
Vapour Temperature	No Data Available
Viscosity	No Data Available
Volatile Percent	No Data Available
VOC Volume	No Data Available
Additional Characteristics	No information available.
Potential for Dust Explosion	Not applicable.
Fast or Intensely Burning Characteristics	Risk of violent reaction or explosion!
Flame Propagation or Burning Rate of Solid Materials	No information available.
Non-Flammables That Could Contribute Unusual Hazards to a Fire	CAUTION: This product has a very low flash point: Use of water spray when fighting fire may be inefficient.
Properties That May Initiate or Contribute to Fire Intensity	HIGHLY FLAMMABLE LIQUID & VAPOUR: Will be easily ignited by heat, sparks or flame.
Reactions That Release Gases or Vapours	Combustion or thermal/oxidative degradation will produce irritating and/or toxic gases, including oxides of Carbon and Nitrogen, smoke and other organic compounds.
Release of Invisible Flammable Vapours and Gases	Vapours may form explosive mixtures with air.

10. STABILITY AND REACTIVITY

General Information	This product is unlikely to react or decompose under normal storage conditions. Reacts violently with strong oxidants - This generates fire and explosion hazard.
Chemical Stability	This material is stable under recommended storage and handling conditions.
Conditions to Avoid	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Take precautionary measures against static discharge.
Materials to Avoid	Incompatible/reactive with strong oxidising agents.
Hazardous Decomposition Products	Combustion or thermal/oxidative degradation will produce irritating and/or toxic gases, including oxides of Carbon and Nitrogen, smoke and other organic compounds.
Hazardous Polymerisation	This product will not undergo polymerisation reactions.

11. TOXICOLOGICAL INFORMATION

General Information	<ul style="list-style-type: none"> - Acute toxicity: Toluene is of low acute toxicity from oral/dermal/inhalation exposure; However, is known to cause central nervous system (CNS) toxicity immediately after exposure to high concentrations of the chemical by inhalation or ingestion [NICNAS]. Swallowing can result in nausea, vomiting and irritation of the gastrointestinal tract. Exposure at high levels could cause cardiac dysrhythmia and unconsciousness. - Skin corrosion/irritation: Causes skin irritation. The substance defats the skin, which may cause dryness or cracking. - Eye damage/irritation: May cause eye irritation. Slight eye irritation (Rabbits) [OECD TG 405; NICNAS]. - Respiratory/skin sensitisation: Did not cause skin sensitisation (GPMT) [NICNAS]. - Germ cell mutagenicity: Based on the weight of evidence, Toluene is not mutagenic [NICNAS]. - Carcinogenicity: Toluene (CAS No. 108-88-3) is classified by the IARC Monographs as "Not classifiable as to its carcinogenicity to humans" (Group 3). - Reproductive toxicity: May damage fertility or the unborn child. In humans, Toluene has been shown to cause congenital defects in infants born to mothers who were exposed to high doses during pregnancy. Long-term exposure at lower doses produced no effects on the fertility of male workers, but female workers showed significantly reduced fertility [NICNAS]. - STOT (single exposure): May cause drowsiness or dizziness (CNS effects). Material may be an irritant to mucous membranes and respiratory tract. Inhalation of vapour can result in headaches, dizziness and possible nausea. Inhalation of high concentrations can produce central nervous system depression, which can lead to loss of co-ordination, impaired judgement and if exposure is prolonged, unconsciousness. - STOT (repeated exposure): May cause damage to organs (neurological effects) through prolonged or repeated inhalation exposure; including impaired colour vision, impaired hearing, decreased performance in neurobehavioural analysis, changes in motor and sensory nerve conduction velocity, headache and dizziness [NICNAS]. - Aspiration toxicity: May be fatal if swallowed and enters airways. Small amounts of liquid aspirated into the respiratory system during ingestion or vomiting may cause bronchopneumonia or pulmonary oedema.
Acute	
Ingestion	Acute toxicity (Oral): - LD50, Rat: >2,000 mg/kg [Supplier's SDS]. - LD50, Rats: 2,600 - 7,500 mg/kg bw. [NICNAS].
Other	Acute toxicity (Dermal): - LD50, Rabbit: >2,000 mg/kg [Supplier's SDS].
Inhalation	Acute toxicity (Inhalation): - LC50, Rat: >20 mg/L (4 h) [Supplier's SDS]. - LC50, Mice: 20,000 - 26,000 mg/m3 [NICNAS]. - LC50, Rats: approx. 45,000 mg/m3 [NICNAS].
Carcinogen Category	None

12. ECOLOGICAL INFORMATION

Ecotoxicity	Acute aquatic hazard: - This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): >100 mg/L Long-term aquatic hazard: - This material has been classified as non-hazardous. Non-rapidly or rapidly degradable substance for which there are adequate chronic toxicity data available OR in the absence of chronic toxicity data, Acute toxicity estimate (based on ingredients): >100 mg/L, where the substance is not rapidly degradable and/or BCF < 500 and/or log Kow < 4.
Persistence/Degradability	The material is readily biodegradable.
Mobility	Floats on water. If product enters soil, it will be highly mobile and may contaminate groundwater.
Environmental Fate	Avoid release to the environment.
Bioaccumulation Potential	This material is not expected to significantly bioaccumulate.
Environmental Impact	No Data Available

13. DISPOSAL CONSIDERATIONS

General Information	If possible, material and its container should be recycled. If material or container cannot be recycled, dispose of in accordance with local/regional/national regulations. Persons conducting disposal, recycling or reclamation activities should ensure that appropriate personal protection equipment is used (see SECTION 8).
Special Precautions for Land Fill	This product may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. If it has been contaminated, it may be possible to reclaim the product by filtration, distillation or some other means. If neither of these options is suitable, consider controlled incineration.

14. TRANSPORT INFORMATION

Land Transport (Australia)

ADG Code

Proper Shipping Name	TOLUENE
Class	3 Flammable Liquids
Subsidiary Risk(s)	No Data Available
EPG	16 Liquids - Highly Flammable, Toxic
UN Number	1294
Hazchem	3YE
Pack Group	II
Special Provision	No Data Available

Land Transport (Malaysia)

ADR Code

Proper Shipping Name	TOLUENE
Class	3 Flammable Liquids
Subsidiary Risk(s)	No Data Available
EPG	16 Liquids - Highly Flammable, Toxic
UN Number	1294
Hazchem	3YE
Pack Group	II
Special Provision	No Data Available

Land Transport (New Zealand)

NZS5433

Proper Shipping Name	TOLUENE
Class	3 Flammable Liquids
Subsidiary Risk(s)	No Data Available
EPG	16 Liquids - Highly Flammable, Toxic
UN Number	1294
Hazchem	3YE
Pack Group	II
Special Provision	No Data Available

Land Transport (United States of America)

US DOT

Proper Shipping Name	TOLUENE
Class	3 Flammable Liquids
Subsidiary Risk(s)	No Data Available
ERG	130 Flammable Liquids (Non-Polar / Water-Immiscible / Noxious)
UN Number	1294
Hazchem	3YE
Pack Group	II
Special Provision	No Data Available

Sea Transport

IMDG Code

Proper Shipping Name	TOLUENE
Class	3 Flammable Liquids
Subsidiary Risk(s)	No Data Available
UN Number	1294
Hazchem	3YE
Pack Group	II
Special Provision	No Data Available
EMS	F-E, S-D
Marine Pollutant	No

Air Transport

IATA DGR

Proper Shipping Name	TOLUENE
Class	3 Flammable Liquids
Subsidiary Risk(s)	No Data Available
UN Number	1294
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 TOLUENE
Poisons Schedule (Aust) Schedule 6

Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

Approval Code HSR001227 (Reissued)

National/Regional Inventories

Australia (AIC)	Listed
Canada (DSL)	Not Determined
Canada (NDSL)	Not Determined
China (IECSC)	Not Determined
Europe (EINECS)	203-625-9
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

Related Product Codes ANSTAT2050, TOLUEB1000, TOLUEB1001, TOLUEB1002, TOLUEB1003, TOLUEB1004, TOLUEB1005, TOLUEB3000, TOLUEB3500, TOLUEB4000, TOLUEN0400, TOLUEN0500, TOLUEN0600, TOLUEN0700, TOLUEN0701, TOLUEN0702, TOLUEN0703, TOLUEN0705, TOLUEN1000, TOLUEN1001, TOLUEN1002, TOLUEN1003, TOLUEN1004, TOLUEN1005, TOLUEN1006, TOLUEN1007, TOLUEN1008, TOLUEN1009, TOLUEN1010, TOLUEN1011, TOLUEN1012, TOLUEN1013, TOLUEN1014, TOLUEN1015, TOLUEN1016, TOLUEN1017, TOLUEN1018, TOLUEN1019, TOLUEN1020, TOLUEN1021, TOLUEN1022, TOLUEN1023, TOLUEN1024, TOLUEN1025, TOLUEN1026, TOLUEN1027, TOLUEN1030, TOLUEN1050, TOLUEN1055, TOLUEN2000, TOLUEN2001, TOLUEN2200, TOLUEN2400, TOLUEN2500, TOLUEN2900, TOLUEN2901,

TOLUEN3000, TOLUEN3001, TOLUEN3010, TOLUEN3020, TOLUEN3030, TOLUEN3040, TOLUEN3050, TOLUEN3051, TOLUEN3052, TOLUEN3060, TOLUEN3061, TOLUEN3062, TOLUEN3070, TOLUEN3080, TOLUEN3090, TOLUEN3100, TOLUEN3101, TOLUEN3110, TOLUEN3111, TOLUEN3112, TOLUEN3113, TOLUEN3114, TOLUEN3120, TOLUEN3130, TOLUEN3150, TOLUEN3500, TOLUEN3600, TOLUEN4000, TOLUEN4500, TOLUEN5000, TOLUEN5001, TOLUEN5002, TOLUEN5500, TOLUEN5501, TOLUEN5502, TOLUEN5600, TOLUEN6000, TOLUEN6001, TOLUEN6500, TOLUEN7000, TOLUEN7100, TOLUEN7500, TOLUEN8000, TOLUEN8500, TOLUEN8600, TOLUEN8700, TOLUEN8800, TOLUEN9000, TOLUEN9500

Revision

5

Revision Date

04 Nov 2021

Key/Legend

< Less Than

> Greater Than

AICS Australian Inventory of Chemical Substances**atm** Atmosphere**CAS** Chemical Abstracts Service (Registry Number)**cm²** Square Centimetres**CO₂** Carbon Dioxide**COD** Chemical Oxygen Demand**deg C (°C)** Degrees Celcius**EPA (New Zealand)** Environmental Protection Authority of New Zealand**deg F (°F)** Degrees Farenheit**g** Grams**g/cm³** Grams per Cubic Centimetre**g/l** Grams per Litre**HSNO** Hazardous Substance and New Organism**IDLH** Immediately Dangerous to Life and Health**immiscible** Liquids are insoluable in each other.**inHg** Inch of Mercury**inH₂O** Inch of Water**K** Kelvin**kg** Kilogram**kg/m³** Kilograms per Cubic Metre**lb** Pound**LC₅₀** LC stands for lethal concentration. LC₅₀ is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours.**LD₅₀** LD stands for Lethal Dose. LD₅₀ is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.**ltr or L** Litre**m³** Cubic Metre**mbar** Millibar**mg** Milligram**mg/24H** Milligrams per 24 Hours**mg/kg** Milligrams per Kilogram**mg/m³** Milligrams per Cubic Metre**Misc or Miscible** Liquids form one homogeneous liquid phase regardless of the amount of either component present.**mm** Millimetre**mmH₂O** Millimetres of Water**mPa.s** Millipascals per Second**N/A** Not Applicable**NIOSH** National Institute for Occupational Safety and Health**NOHSC** National Occupational Health 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