

Classified as hazardous in accordance with the criteria of EPA New Zealand

Section 1 - Identification

Product Identifier

Product Name <u>Aqualine™ Water Standard 5mg/ml</u>

Recommended Use Laboratory chemicals.
Uses advised against No Information available

Product Code AL2730-500

Address Thermo Fisher Scientific New Zealand Ltd

244 Bush Road, Albany, Auckland, New Zealand

Emergency Tel. CHEMTREC®

09 980 6780 or +64 9 980 6780

Telephone / Fax Numbers Tel: 09 980 6700

Fax: 09 980 6788

E-mail address ANZinfo@thermofisher.com

Section 2 - Hazard(s) Identification

Classification under Work Safe New Zealand

Classified as hazardous in accordance with the criteria of EPA New Zealand

GHS Classification

Physical hazards

Flammable liquids Category 3

Health hazards

Category 1 Aspiration Toxicity Category 4 **Acute Oral Toxicity Acute Dermal Toxicity** Category 4 Acute Inhalation Toxicity - Vapors Category 4 Category 2 Skin Corrosion/Irritation Serious Eye Damage/Eye Irritation Category 1 Reproductive Toxicity Category 2 Specific target organ toxicity - (single exposure) Category 3 Specific target organ toxicity - (repeated exposure) Category 2

Environmental hazards

Chronic aquatic toxicity Category 3

Label Elements

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Signal Word

Danger

Hazard Statements

- H318 Causes serious eye damage
- H226 Flammable liquid and vapor
- H304 May be fatal if swallowed and enters airways
- H315 Causes skin irritation
- H373 May cause damage to organs through prolonged or repeated exposure
- H412 Harmful to aquatic life with long lasting effects
- H335 May cause respiratory irritation
- H336 May cause drowsiness or dizziness
- H361 Suspected of damaging fertility or the unborn child
- H302 + H312 + H332 Harmful if swallowed, in contact with skin or if inhaled

Precautionary Statements

Prevention

- P242 Use non-sparking tools
- P243 Take action to prevent static discharges
- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
- P233 Keep container tightly closed
- P240 Ground and bond container and receiving equipment
- P270 Do not eat, drink or smoke when using this product
- P264 Wash face, hands and any exposed skin thoroughly after handling
- P271 Use only outdoors or in a well-ventilated area
- P280 Wear protective gloves/protective clothing/eye protection/face protection

Response

- P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower
- P310 Immediately call a POISON CENTER or doctor
- P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing
- P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- P330 Rinse mouth
- P331 Do NOT induce vomiting
- P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish
- P362 + P364 Take off contaminated clothing and wash it before reuse

Storage

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

Disposal

P501 - Dispose of contents/ container to an approved waste disposal plant

Other hazards which do not result in classification

Toxic to terrestrial vertebrates

Section 3 - Composition and Information on Ingredients

Component	CAS No	Weight %
Xylenes (o-, m-, p- isomers)	1330-20-7	70-80
n-Butyl alcohol	71-36-3	20-30
Water	7732-18-5	<0.1

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Section 4 - First Aid Measures

Description of first aid measures

General Advice If symptoms persist, call a physician.

New Zealand Emergency Tel. CHEMTREC®

09 980 6780 or +64 9 980 6780

Inhalation Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if

symptoms occur. Risk of serious damage to the lungs (by aspiration).

Eye ContactRinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Immediate medical attention is required.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists,

call a physician.

Ingestion Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting. Call

a physician or poison control center immediately. If vomiting occurs naturally, have victim

lean forward.

Self-Protection of the First Aider Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination.

First Aid Facilities Eyewash, safety shower and washroom.

Most important symptoms and

effects

Causes severe eye damage. Difficulty in breathing. Causes eye burns. Symptoms of

overexposure may be headache, dizziness, tiredness, nausea and vomiting

Notes to Physician Treat symptomatically. Symptoms may be delayed.

Section 5 - Fire Fighting Measures

Suitable Extinguishing Media

Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam. Water mist may be used to cool closed containers.

Extinguishing media which must not be used for safety reasons

No information available.

Specific Hazards Arising from the Chemical

Flammable. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Containers may explode when heated.

Hazardous Combustion Products

Carbon monoxide (CO), Carbon dioxide (CO2).

Special protective equipment and precautions for fire fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Section 6 - Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures

Emergency procedures

Use personal protective equipment as required. Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges.

Environmental Precautions

Should not be released into the environment. Do not flush into surface water or sanitary sewer system. See Section 12 for

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additional Ecological Information. Avoid release to the environment. Collect spillage.

Methods for Containment and Clean Up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

Precautions to prevent secondary hazards

Clean contaminated objects and areas thoroughly observing environmental regulations

Reference to Other Sections

Refer to protective measures listed in Sections 8 and 13.

Section 7 - Handling and Storage

Precautions for Safe Handling

Advice on safe handling

Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Ensure adequate ventilation. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. Take precautionary measures against static discharges.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Flammables area. Keep away from heat, sparks and flame.

Incompatible Materials

Strong oxidizing agents.

AS/NZS 2243.10:2004, Safety in laboratories - Storage of chemicals AS 1940-2004 - The storage and handling of flammable and combustible liquids

Section 8 - Exposure Controls and Personal Protection

Control parameters

Exposure limits

NZ - Workplace Exposure Standards and Biological Exposure Indices (6th edition). New Zealand Department of Labor **UK** - EH40/2005 Work Exposure Limits, Fourth edition. Published 2020.

ACGIH - Threshold Limit Values - Ceiling (TLV-C) guidelines by the American Conference of Governmental Industrial Hygienists (ACGIH) for controlling worker exposure to airborne chemical concentrations in the workplace.

AUS - Exposure Standards for Atmospheric Contaminants in the Occupational Environment - Guidance Note on the Interpretation of Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:3008(1995)] Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003(1995)]

Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003(199 updated in August, 2005. Safe Work Australia

Component	New Zealand WEL	Australia	ACGIH TLV	The United Kingdom
Xylenes (o-, m-, p- isomers)	TWA: 50 ppm TWA: 217 mg/m³	STEL: 150 ppm STEL: 655 mg/m³ TWA: 80 ppm TWA: 350 mg/m³	TWA: 20 ppm	STEL: 100 ppm 15 min STEL: 441 mg/m³ 15 min TWA: 50 ppm 8 hr TWA: 220 mg/m³ 8 hr Skin
n-Butyl alcohol	Ceiling: 50 ppm Ceiling: 150 mg/m ³ Skin		TWA: 20 ppm	50ppm STEL; 154mg/m³ STEL

Biological limit values

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NZ - Substances assigned Biological Exposure Indices in the New Zealand Workplace Exposure Standards and Biological Exposure Indices (6th edition). New Zealand Department of Labor

UK - Biological Monitoring Guidance Values provided by the UK's Health and Safety Executive (HSE) Control of Substances Hazardous to Health Regulations (COSHH) 2002 (as amended) and EH40/2005.

ACGIH - American Conference of Governmental Industrial Hygienists (ACGIH) TLVs® and BEIs®- Threshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Indices. 2022 Edition

Component	New Zealand	Australia	ACGIH - Biological	United Kingdom
			Exposure Indices	
Xylenes (o-, m-, p- isomers)	1.5 g/L (urine) end of shift		1.5 g/g creatinine	Methyl hippuric acid: 650
	(Methylhippuric acid)		Medium: urine	mmol/mol creatinine urine
			Time: end of shift	post shift
			Determinant: Methylhippuric	
			acids	

Appropriate engineering controls

Engineering Measures

Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location. Use explosion-proof electrical/ventilating/lighting equipment. Ensure adequate ventilation, especially in confined areas. Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

Individual protection measures, such as personal protective equipment

Eye Protection Goggles (Australian/New Zealand Standard AS/NZS 1337 - Eye protectors for Industrial

applications)

Hand Protection Protective gloves

Glove	material	Breakthrough time	Glove thickness	AUS/NZ Standard	Glove comments
Vito	on (R).	See manufacturers	-	AS/NZS 2161	(minimum requirement)
		recommendations			

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

Skin and body protection Long sleeved clothing

Repiratory ProtectionUse an AS/NZS 1716 approved respirator if exposure limits are exceeded or if irritation or

other symptoms are experienced. To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained in line with AS/NZS 1715 on the use

and maintenance of repiratory protective devices

Recommended Filter type: Organic gases and vapours filter Type A Brown conforming to EN14387 (or AUS/NZ

equivalent)

Recommended half mask:- Valve filtering: EN405 or Half mask: EN140 plus filter, EN 141 (or AUS/NZ equivalent)

When RPE is used a face piece Fit Test should be conducted

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls Prevent product from entering drains. Do not allow material to contaminate ground water

system. Local authorities should be advised if significant spillages cannot be contained.

Section 9 - Physical and Chemical Properties

Information on basic physical and chemical properties

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Physical State Liquid

Appearance
Odor
Odor Threshold
PH
No information available
No data available
No information available
No information available

Melting Point/RangeNo data availableSoftening PointNo data availableBoiling Point/RangeNo information available

Flammability (liquid) Flammable On basis of test data

Flammability (solid,gas) Not applicable Liquid

Explosion Limits No data available

Flash Point 29 °C / 84.2 °F Method - No information available

Autoignition Temperature

Decomposition Temperature

Viscosity

Water Solubility

463.9 °C / 867 °F

No data available

No data available

Partially soluble

Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

Componentlog PowXylenes (o-, m-, p- isomers)3.15n-Butyl alcohol1

Vapor Pressure No data available

Density / Specific Gravity 0.851

Bulk DensityNot applicableLiquidVapor DensityNo data available(Air = 1.0)

Particle characteristics Not applicable (liquid)

Other information

Explosive Properties explosive air/vapour mixtures possible

Section 10 - Stability and Reactivity

Reactivity None known, based on information available

Stability Stable under normal conditions.

Sensitivity to Mechanical Impact No information available

Sensitivity to Static Discharge No information available

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

Conditions to Avoid Incompatible products, Excess heat, Keep away from open flames, hot surfaces and

sources of ignition.

Incompatible Materials Strong oxidizing agents.

Hazardous Decomposition Products Carbon monoxide (CO). Carbon dioxide (CO2).

Section 11 - Toxicological Information

Acute Effects

Information on likely routes of exposure

Product Information

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Inhalation Harmful by inhalation. May cause irritation of respiratory tract.

Eyes May cause irritation.

Skin Harmful in contact with skin. May cause irritation.

Ingestion Harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and

diarrhea. Potential for aspiration if swallowed.

Numerical measures of toxicity

(a) acute toxicity;

Oral No data available
Dermal No data available
Inhalation No data available

Toxicology data for the components

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation	
Xylenes (o-, m-, p- isomers)	LD50 = 3500 mg/kg (Rat)	LD50 > 4350 mg/kg (Rabbit)	29.08 mg/L [MOE Risk	
			Assessment Vol.1, 2002]	
n-Butyl alcohol	LD50 = 700 mg/kg (Rat)	LD50 = 3402 mg/kg (Rabbit)	LC50 > 8000 ppm (Rat) 4 h	
Water	-	-	-	

(b) skin corrosion/irritation; No data available

(c) serious eye damage/irritation; No data available

(d) respiratory or skin sensitization;

Respiratory SkinNo data available
No data available

(e) germ cell mutagenicity; No data available

(f) carcinogenicity; No data available

There are no known carcinogenic chemicals in this product

(g) reproductive toxicity; No data available

(h) STOT-single exposure; No data available

Results / Target organs Central nervous system (CNS)

Respiratory system

(i) STOT-repeated exposure; No data available

Target Organs Heart, Liver, Kidney.

(j) aspiration hazard; Category 1

Symptoms / effects,both acute and delayed

Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Section 12 - Ecological Information

Ecotoxicity

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Aquatic ecotoxicity

Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.

Component	Freshwater Fish	Water Flea	Freshwater Algae	Microtox
Xylenes (o-, m-, p- isomers)	LC50: = 780 mg/L, 96h	LC50: = 0.6 mg/L, 48h		EC50 = 0.0084 mg/L 24
	semi-static (Cyprinus	(Gammarus lacustris)		h
	carpio)	EC50: = 3.82 mg/L , $48h$		
	LC50: > 780 mg/L, 96h	(water flea)		
	(Cyprinus carpio)			
	LC50: 30.26 - 40.75			
	mg/L, 96h static			
	(Poecilia reticulata)			
	LC50: 23.53 - 29.97			
	mg/L, 96h static			
	(Pimephales promelas)			
	LC50: 7.711 - 9.591			
	mg/L, 96h static			
	(Lepomis macrochirus)			
	LC50: = 19 mg/L, 96h			
	(Lepomis macrochirus)			
	LC50: 13.1 - 16.5 mg/L,			
	96h flow-through			
	(Lepomis macrochirus)			
	LC50: 13.5 - 17.3 mg/L,			
	96h (Oncorhynchus			
	mykiss)			
	LC50: 2.661 - 4.093			
	mg/L, 96h static			
	(Oncorhynchus mykiss)			
	LC50: = 13.4 mg/L, 96h			
	flow-through			
	(Pimephales promelas)			
n-Butyl alcohol	LC50: 1376 mg/L, 96h	EC50: 1328 mg/L, 48h	EC50: 225 mg/L, 96h	EC50 = 2041.4 mg/L 5
	(Pimephales promelas)	(Daphnia magna) OECD	(Pseudokirchneriella	min
	OECD Guideline 203:	Guideline 202	subcapitata) OECD	EC50 = 2186 mg/L 30
	100000 - 500000 μg/L,	EC50: 1897 - 2072	Guideline 201	min
	96h static (Lepomis	mg/L, 48h Static	EC50: > 500 mg/L, 72h	EC50 = 3980 mg/L 24 h
	macrochirus)	(Daphnia magna)	(Desmodesmus	EC50 = 4400 mg/L 17 h
	LC50: = 1740 mg/L, 96h	EC50: = 1983 mg/L, 48h	subspicatus)	
	flow-through	(Daphnia magna)	EC50: > 500 mg/L, 96h	
	(Pimephales promelas)		(Desmodesmus	
	$LC50: = 1910000 \mu g/L$		`subspicatus)	
	96h static (Pimephales		, ,	
	promelas)			
	LC50: 1730 - 1910			
	mg/L, 96h static			
	(Pimephales promelas)			
] ' ' '			

Terrestrial ecotoxicity

There is no data for this product

Persistence and Degradability

Component	Degradability
n-Butyl alcohol	70 %
71-36-3 (20-30)	

Bioaccumulative Potential

Component	log Pow	Bioconcentration factor (BCF)
Xylenes (o-, m-, p- isomers)	3.15	0.6 - 15 dimensionless
n-Butyl alcohol	1	0.64 dimensionless

Mobility

No information available. .

Other adverse effects

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Endocrine Disruptor Information Persistent Organic Pollutant Ozone Depletion Potential

This product does not contain any known or suspected endocrine disruptors. This product does not contain any known or suspected substance.

This product does not contain any known or suspected substance This product does not contain any known or suspected substance

Section 13 - Disposal Considerations

Waste treatment methods

Waste from Residues/Unused Products

Do not allow into drains or watercourses or dispose of where ground or surface waters may be affected. Wastes, including emptied containers, are controlled wastes and should be disposed of in accordance with all federal, E.P.A., state and local regulations. Assure conformity with all applicable regulations.

Contaminated Packaging

Dispose of this container to hazardous or special waste collection point. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep product and empty container away from heat and sources of ignition.

Other Information

Disposal agencies or waste contractors must comply with the New Zealand Hazardous Substances (Disposal) Regulations . Do not flush to sewer. Waste codes should be assigned by the user based on the application for which the product was used. Can be landfilled or incinerated, when in compliance with local regulations. Do not empty into drains

Section 14 - Transport Information

Component	Hazchem Code
Xylenes (o-, m-, p- isomers)	3Y
1330-20-7 (70-80)	3YE

NZS 5433:2020

UN-No UN1993

Proper Shipping Name Flammable liquid, n.o.s.

Technical Shipping Name (Contains xylene and n-butanol)

Hazard Class 3
Packing Group III

IATA

UN-No UN1993

Proper Shipping Name Flammable liquid, n.o.s.

Technical Shipping Name (Contains xylene and n-butanol)

Hazard Class 3
Packing Group III

IMDG/IMO

UN-No UN1993

Proper Shipping Name Flammable liquid, n.o.s.

Technical Shipping Name (Contains xylene and n-butanol)

Hazard Class 3 Packing Group III

Environmental hazards No hazards identified

Transport in bulk according to Annex II of MARPOL 73/78 and the

Not applicable, packaged goods

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IBC Code

Special Precautions No special precautions required. Please refer to the applicable dangerous goods

regulations for additional information.

Additional information None known

Section 15 - Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

National Regulations

Any applicable tolerable exposure limits and environmental exposure limits according to the EPA Controls for Hazardous Substances are listed below

Component	Tolerable Exposure Limit (TEL) Air	Tolerable Exposure Limit (TEL) Water	Tolerable Exposure Limit (TEL) Surface	Environmental Exposure Limits (EEL)
Xylenes (o-, m-, p- isomers)	0.87 mg/m ³	0.6 mg/L		

Certified handlers, tracking and controlled substance license requirements

Certified handlers are required for some substances. This includes substances requiring a controlled substance license, and most explosives, vertebrates toxic agents, and certain fumigants. Acutely toxic substances which are a Category 1 or 2, such as pesticides also require Certified handlers. Please check the Health and Safety at Work Act 2015 for further information. Tracking is required for some highly hazardous substances. These substances need to be under the control of an appropriately trained person or appropriately secured. Please check the Health and Safety at Work Act 2015 for further information.

Prohibition or notification/licensing requirements

Shown below are details of specific prohibition/notifications or licencing requirements when they apply.

International Regulations

Ozone Depletion Potential This product does not contain any known or suspected substance

Persistent Organic Pollutant This product does not contain any known or suspected substance

Rotterdam Convention (PIC) Not applicable

Authorisation/Restrictions according to EU REACH

Component	REACH (1907/2006) - Annex XIV -	REACH (1907/2006) - Annex XVII -	
	Substances Subject to Authorization	Restrictions on Certain Dangerous Substances	List of Substances of Very High
			Concern (SVHC)
Xylenes (o-, m-, p- isomers)	-	Use restricted. See item 75.	-
		(see link for restriction details)	
n-Butyl alcohol	-	Use restricted. See item 75. (see link for restriction details)	-

https://echa.europa.eu/substances-restricted-under-reach

International Inventories

New Zealand (NZIoC), Australia (AICS), Europe (EINECS/ELINCS/NLP), Korea (KECL), China (IECSC), Taiwan (TCSI), Japan (ISHL), Canada (DSL/NDSL), Philippines (PICCS). US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

Component	CAS No	NZIoC	AICS	EINECS	ELINCS	NLP	KECL	IECSC	TCSI
Xylenes (o-, m-, p- isomers)	1330-20-7	X	Χ	215-535-7	i	-	KE-35427	X	Х
n-Butyl alcohol	71-36-3	X	Χ	200-751-6	-	-	KE-03867	Χ	Х
Water	7732-18-5	X	Χ	231-791-2	ı	ı	KE-35400	Χ	X

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Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	DSL	NDSL	PICCS	ISHL	ENCS
Xylenes (o-, m-, p- isomers)	1330-20-7	Х	ACTIVE	Х	-	Х	Х	Х
n-Butyl alcohol	71-36-3	Х	ACTIVE	Х	-	Х	Х	Х
Water	7732-18-5	Х	ACTIVE	Х	-	Х	-	X

Legend: X - Listed '-' - Not Listed KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

Section 16 - Other Information

This safety data sheet complies with the requirements of the EPA Hazardous Substances (Hazard Classification) Notice 2020 and WorkSafe New Zealand Regulations

Legend

NZIoC - New Zealand Inventory of Chemicals

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

IECSC - Chinese Inventory of Existing Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

TWA - Time Weighted Average

IARC - International Agency for Research on Cancer NZS 5433:2020 - Transport of Dangerous Goods on Land

ICAO/IATA - International Civil Aviation Organization/International Air Transport Association

MARPOL - International Convention for the Prevention of Pollution from Ships

LD50 - Lethal Dose 50%

EC50 - Effective Concentration 50% WEL - Workplace Exposure Limit DNEL - Derived No Effect Level

POW - Partition coefficient Octanol:Water **vPvB** - very Persistent, very Bioaccumulative

VOC - (Volatile Organic Compound)

AICS - Australian Inventory of Chemical Substances

EINECS/ELINCS - European Inventory of Existing Commercial Chemical

Substances/EU List of Notified Chemical Substances
ENCS - Japanese Existing and New Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

CAS - Chemical Abstracts Service

ACGIH - American Conference of Governmental Industrial Hygienists

PNEC - Predicted No Effect Concentration

OECD - Organisation for Economic Co-operation and Development **IMO/IMDG** - International Maritime Organization/International Maritime Dangerous Goods Code

ADG - Australian Code for the Transport of Dangerous Goods by Road and Rail

LC50 - Lethal Concentration 50% ATE - Acute Toxicity Estimate

RPE - Respiratory Protective Equipment
NOEC - No Observed Effect Concentration

BCF - Bioconcentration factor

PBT - Persistent, Bioaccumulative, Toxic

Key literature references and sources for data

HSNO classifications provided in the New Zealand Chemical Classification Information Database (CCID).

https://echa.europa.eu/information-on-chemicals

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

EPA Guide to classifying hazardous substances in New Zealand

EPA - Assigning a product to an existing HSNO approval guide

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Physical hazards
Health Hazards
Calculation method
Environmental hazards
Cn basis of test data
Calculation method
Calculation method

Training Advice

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers.

Chemical incident response training.

Fire prevention and fighting, identifying hazards and risks, static electricity, explosive atmospheres posed by vapours and dusts.

Revision Date 10-Mar-2023 Revision Summary Not applicable

Disclaimer

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The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of Safety Data Sheet

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