

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

# **Section 1 - Identification**

**Product Identifier** 

Product Name SP6 RNA Polymerase in Tris buffer

Recommended Use Laboratory chemicals.
Uses advised against No Information available

Product Code J64222

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

Based on available data, the classification criteria are not met

**Health hazards** 

Skin Sensitization Category 1

**Environmental hazards** 

Based on available data, the classification criteria are not met

# **Label Elements**



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Signal Word Warning

#### **Hazard Statements**

H317 - May cause an allergic skin reaction

#### **Precautionary Statements**

#### Prevention

P272 - Contaminated work clothing should not be allowed out of the workplace

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P280 - Wear protective gloves

#### Response

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention

P362 + P364 - Take off contaminated clothing and wash it before reuse

#### Storage

P403 - Store in a well-ventilated place

## Disposal

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

### Other hazards which do not result in classification

Contains a known or suspected endocrine disruptor

Included in the list established in accordance with Article 59(1) for having endocrine disrupting properties

Contains a substance on the National Authorities Endocrine Disruptor Lists

# **Section 3 - Composition and Information on Ingredients**

Component	CAS No	Weight %
Glycerin	56-81-5	50
Water	7732-18-5	48.23
1,3-Propanediol, 2-amino-2-(hydroxymethyl)-, hydrochloride	1185-53-1	0.79
Sodium chloride	7647-14-5	0.59
2-Mercaptoethanol	60-24-2	0.16
Poly(oxy-1,2-ethanediyl), .alpha[4-(1,1,3,3-tetramethylbutyl)phenyl]omegahydro xy-	9002-93-1	0.1
Nucleotidyltransferase, ribonucleate	9014-24-8	0.1
Ethylenediamine tetraacetic acid (EDTA)	60-00-4	0.03

# **Section 4 - First Aid Measures**

#### Description of first aid measures

**General Advice** If symptoms persist, call a physician.

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

symptoms occur.

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get

medical attention.

**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.

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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

May cause allergic skin reaction. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest

pain, muscle pain or flushing

Notes to Physician Treat symptomatically.

# **Section 5 - Fire Fighting Measures**

## **Suitable Extinguishing Media**

Carbon dioxide (CO<sub>2</sub>). Powder. Water spray. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

## Extinguishing media which must not be used for safety reasons

No information available.

#### **Specific Hazards Arising from the Chemical**

Thermal decomposition can lead to release of irritating gases and vapors.

#### **Hazardous Combustion Products**

Nitrogen oxides (NOx), Sulfur oxides, Hydrogen chloride, Sodium oxides.

#### 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**

Ensure adequate ventilation. Use personal protective equipment as required.

### **Environmental Precautions**

Should not be released into the environment. See Section 12 for additional Ecological Information.

### Methods for Containment and Clean Up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

## 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. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation.

## **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

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re-use. Wash hands before breaks and after work.

#### Conditions for Safe Storage, Including any Incompatibilities

#### **Storage Conditions**

Store in freezer.

#### **Incompatible Materials**

Oxidizing agent.

AS/NZS 2243.10:2004, Safety in laboratories - Storage of chemicals

# <u>Section 8 - Exposure Controls and Personal Protection</u>

### Control parameters

#### **Exposure limits**

NZ - Workplace Exposure Standards and Biological Exposure Indices (6th edition). New Zealand Department of Labor 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)] updated in August, 2005. Safe Work Australia

UK - EH40/2005 Work Exposure Limits, Fourth edition. Published 2020.

Component	New Zealand WEL	Australia	ACGIH TLV	The United Kingdom
Glycerin	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>		TWA: 10 mg/m <sup>3</sup> 8 hr (mist
				only)

#### **Biological limit values**

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

## Appropriate engineering controls

### **Engineering Measures**

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 Wear safety glasses with side shields (or 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
Natural rubber, Nitrile	See manufacturers	-	AS/NZS 2161	(minimum requirement)
rubber, Neoprene, PVC.	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 Protection**Use 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

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and maintenance of repiratory protective devices

Particulates filter conforming to EN 143 (or AUS/NZ equivalent) **Recommended Filter type:** 

Recommended half mask:-Particle filtering: EN149:2001 (or AUS/NZ equivalent)

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

Liquid

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

**Environmental exposure controls** No information available.

# **Section 9 - Physical and Chemical Properties**

#### Information on basic physical and chemical properties

**Physical State** Liquid

**Appearance** Colorless

No information available Odor **Odor Threshold** No data available No information available Melting Point/Range No data available **Softening Point** No data available **Boiling Point/Range** No information available Flammability (liquid) No data available

Flammability (solid,gas) Not applicable

**Explosion Limits** No data available

**Flash Point** No information available Method - No information available

**Autoignition Temperature** No data available **Decomposition Temperature** No data available No data available **Viscosity** 

Water Solubility Miscible

Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

log Pow Component Glycerin -1.751,3-Propanediol, -3.6

2-amino-2-(hydroxymethyl)-,

hydrochloride

2-Mercaptoethanol -0.056 Poly(oxy-1,2-ethanediyl), 2.7 .alpha.-[4-(1,1,3,3-tetramethylbutyl)phe

nyl]-.omega.-hydroxy-

**Vapor Pressure** 23 hPa @ 20 °C **Density / Specific Gravity** No data available

**Bulk Density** Not applicable Liquid **Vapor Density** No data available (Air = 1.0)

Particle characteristics (liquid) Not applicable

Other information

# **Section 10 - Stability and Reactivity**

Reactivity None known, based on information available

Stability Stable under normal conditions.

No information available **Sensitivity to Mechanical Impact** 

Sensitivity to Static Discharge No information available

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**Hazardous Polymerization**No information available.

**Hazardous Reactions** None under normal processing.

Conditions to Avoid Heat, flames and sparks.

Incompatible Materials Oxidizing agent.

Hazardous Decomposition Products Nitrogen oxides (NOx). Sulfur oxides. Hydrogen chloride. Sodium oxides.

# **Section 11 - Toxicological Information**

#### **Acute Effects**

## Information on likely routes of exposure

#### **Product Information**

**Inhalation**Inhalation of vapors in high concentration may cause irritation of respiratory system. **Eyes**Avoid contact with eyes. Corrosive to the eyes and may cause severe damage including

Avoid contact with eyes. Comosive to the eyes and may cause severe damage including

blindness.

**Skin** Avoid contact with skin. Skin Corrosion/Irritation.

**Ingestion** May be harmful if swallowed.

### Numerical measures of toxicity

(a) acute toxicity;

OralBased on available data, the classification criteria are not metDermalBased on available data, the classification criteria are not metInhalationBased on available data, the classification criteria are not met

### Toxicology data for the components

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Glycerin	12600 mg/kg ( Rat )	> 10 g/kg (Rabbit)	> 2.75 mg/L/4h ( Rat )(mist)
Water	-	-	-
1,3-Propanediol,	OECD 425 (Rat)	OECD 402 (Rat)	
2-amino-2-(hydroxymethyl)-, hydrochloride	LD50 > 5000 mg/kg bw	LD50 > 5000 mg/kg bw	
Sodium chloride	LD50 = 3 g/kg (Rat)	LD50 > 10000 mg/kg (Rabbit)	LC50 > 42 mg/L (Rat) 1 h
2-Mercaptoethanol	LD50 = 244  mg/kg (Rat)	150 μL/kg (Rabbit)	
		112 - 224 mg/kg (Rabbit)	
Poly(oxy-1,2-ethanediyl),	1800 mg/kg (Rat)		
.alpha[4-(1,1,3,3-tetramethylbutyl)phenyl]-			
.omegahydroxy-			
Ethylenediamine tetraacetic acid (EDTA)	4500 mg/kg (Rat)		1 mg/l (rat)
	>2000 mg/kg ( Rat )		

(b) skin corrosion/irritation; No data available

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

(d) respiratory or skin sensitization;

**Respiratory**Skin
No data available
Sub-category 1A

Component	Test method	Test species	Study result
1,3-Propanediol,	OECD Test Guideline 406	guinea pig	non-sensitising
2-amino-2-(hydroxymethyl)-, hydrochloride			_
1185-53-1 ( 0.79 )			

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Sensitization No information available

(e) germ cell mutagenicity; No data available

Component	Test method	Test species	Study result
1,3-Propanediol,	OECD Test Guideline 471	Mammalian	negative
2-amino-2-(hydroxymethyl)-, hydrochloride	Bacterial Reverse Mutation Test	in vitro	_
1185-53-1 ( 0.79 )			

(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

(i) STOT-repeated exposure; No data available

Target Organs No information available.

(j) aspiration hazard; No data available

### Symptoms / effects, both acute and delayed

Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing.

# **Section 12 - Ecological Information**

### **Ecotoxicity**

Aquatic ecotoxicity

Component	Freshwater Fish	Water Flea	Freshwater Algae	Microtox
Glycerin	LC50: 51 - 57 mL/L, 96h static (Oncorhynchus mykiss)		-	
1,3-Propanediol, 2-amino-2-(hydroxymethyl)-, hydrochloride		Daphnia Magna EC50 >100 mg/L (48h)		OECD 209 EC50 > 1000 mg/L (3h)
Sodium chloride	Pimephals prome: LC50: 7650 mg/L/96h	EC50: 1000 mg/L/48h		
2-Mercaptoethanol		EC50: = 1.52 mg/L, 48h (Daphnia magna)		= 125 mg/L EC50 Pseudomonas putida 17 h
Poly(oxy-1,2-ethanediyl), .alpha[4-(1,1,3,3-tetramethylbutyl)phenyl]- .omegahydroxy-	LC50 = 8.9 mg/L 96H LC50 = 4.0 mg/l 96H (Pimephales promelus)	EC50 = 26 mg/L 48h	-	-
Ethylenediamine tetraacetic acid (EDTA)	LC50: 34 - 62 mg/L, 96h static (Lepomis macrochirus) LC50: 44.2 - 76.5 mg/L, 96h static (Pimephales promelas)	EC50: = 113 mg/L, 48h Static (Daphnia magna)	EC50: = 1.01 mg/L, 72h (Desmodesmus subspicatus)	

### **Terrestrial ecotoxicity**

Component	Earthworm	Avian	Honeybees

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Sodium chloride	Acute toxicity: LC50 0.1 - 1 mg/cm2 (Eisenia foetida, 48 h,	
	filter paper)	

## Persistence and Degradability

**Persistence** 

Miscible with water, Persistence is unlikely, based on information available.

Component	Degradability
Poly(oxy-1,2-ethanediyl),	60% >28 days
.alpha[4-(1,1,3,3-tetramethylbutyl)phenyl]omegahydroxy-	
9002-93-1 ( 0.1 )	

#### **Bioaccumulative Potential**

Bioaccumulation is unlikely

Component	log Pow	Bioconcentration factor (BCF)
Glycerin	-1.75	No data available
1,3-Propanediol,	-3.6	No data available
2-amino-2-(hydroxymethyl)-, hydrochloride		
2-Mercaptoethanol	-0.056	No data available
Poly(oxy-1,2-ethanediyl),	2.7	No data available
.alpha[4-(1,1,3,3-tetramethylbutyl)phenyl]-		
.omegahydroxy-		

#### **Mobility**

The product is water soluble, and may spread in water systems. Will likely be mobile in the environment due to its water solubility. Highly mobile in soils

### Other adverse effects

**Endocrine Disruptor Information** 

Ziracomino Zierapter milorimation			
Component	EU - Endocrine Disrupters	EU - Endocrine Disruptors -	Japan - Endocrine Disruptor
	Candidate List	Evaluated Substances	Information
Poly(oxy-1,2-ethanediyl),	Group III Chemical	-	-
.alpha[4-(1,1,3,3-tetramethylbutyl)phenyl]-			
.omegahydroxy-			

Persistent Organic Pollutant Ozone Depletion Potential 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.

Other Information

Disposal agencies or waste contractors must comply with the New Zealand Hazardous
Substances (Disposal) Regulations. Waste codes should be assigned by the user based

on the application for which the product was used. Do not empty into drains.

# **Section 14 - Transport Information**

Component	Hazchem Code
2-Mercaptoethanol	2X
60-24-2 ( 0.16 )	

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NZS 5433:2020 Not regulated

IATA Not regulated

IMDG/IMO Not regulated

**Environmental hazards** No hazards identified

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

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

regulations for additional information.

Not applicable, packaged goods

Additional information None known

# **Section 15 - Regulatory Information**

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

#### **National Regulations**

There are no applicable tolerable exposure limits or environmental exposure limits according to the EPA Controls for Hazardous Substances

#### 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 - Substances Subject to Authorization	REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
Poly(oxy-1,2-ethanediyl), .alpha[4-(1,1,3,3-tetramethylbut yl)phenyl]omegahydroxy-	Endocrine disrupting properties (Article 57(f) - environment) Application date: July 4, 2019 Sunset date: January 4, 2021 Exemption - extended latest application and sunset date for the research,development and	-	SVHC Candidate list - Equivalent level of concern having probable serious effects to the environment (Article 57f - environment)

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	production of medicinal products or medical devices in view of their use for the diagnosis,treatment or prevention of the coronavirus disease (COVID-19)		
Ethylenediamine tetraacetic acid	-	Use restricted. See item 75.	-
(EDTA)		(see link for restriction details)	

After the sunset date the use of this substance requires either an authorization or can only be used for exempted uses, e.g. use in scientific research and development which includes routine analytics or use as intermediate.

https://echa.europa.eu/authorisation-list

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

https://echa.europa.eu/candidate-list-table

#### **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
Glycerin	56-81-5	Х	Х	-	-	-	KE-29297	Χ	Х
Water	7732-18-5	Х	Х	231-791-2	-	-	KE-35400	Х	Х
1,3-Propanediol, 2-amino-2-(hydroxymethyl)-, hydrochloride	1185-53-1	X	Х	214-684-5	-	-	KE-34819	Х	Х
Sodium chloride	7647-14-5	Х	Х	-	-	-	KE-31387	Х	Х
2-Mercaptoethanol	60-24-2	Х	Х	-	-	-	KE-23095	Х	Х
Poly(oxy-1,2-ethanediyl), .alpha[4-(1,1,3,3-tetramethylbutyl )phenyl]omegahydroxy-	9002-93-1	X	Х	-	1	-	KE-33568	Х	Х
Nucleotidyltransferase, ribonucleate	9014-24-8	-	-	-	-	-	-	-	Х
Ethylenediamine tetraacetic acid (EDTA)	60-00-4	Х	Х	-	-	-	KE-13648	Х	Х

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	DSL	NDSL	PICCS	ISHL	ENCS
Glycerin	56-81-5	X	ACTIVE	Х	-	Х	Х	Х
Water	7732-18-5	X	ACTIVE	Х	-	Х	-	Х
1,3-Propanediol, 2-amino-2-(hydroxymethyl)-, hydrochloride	1185-53-1	X	ACTIVE	Х	-	Х	-	Х
Sodium chloride	7647-14-5	X	ACTIVE	Х	-	Х	Х	Х
2-Mercaptoethanol	60-24-2	Х	ACTIVE	Х	-	Х	Х	Х
Poly(oxy-1,2-ethanediyl), .alpha[4-(1,1,3,3-tetramethylbutyl )phenyl]omegahydroxy-	9002-93-1	X	ACTIVE	Х	-	Х	Х	Х
Nucleotidyltransferase, ribonucleate	9014-24-8	-	-	-	-	-	-	-
Ethylenediamine tetraacetic acid (EDTA)	60-00-4	Х	ACTIVE	Х	-	Х	Х	Х

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)

AICS - Australian Inventory of Chemical Substances

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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)

**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 On basis of test data **Health Hazards** Calculation method **Environmental hazards** 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.

22-Mar-2023 **Revision Date Revision Summary** Not applicable

#### **Disclaimer**

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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