

Australian statement of hazardous nature : Classified as hazardous according to criteria of Safe Work Australia

## Section 1 - Identification

**Product Name** Washing Solution 2 Acid

<b>Product Code</b>	<b>CDMSP2209</b>
<b>Address</b>	ThermoFisher Scientific Australia Pty Ltd 5 Caribbean Drive, Scoresby VICTORIA 3179, Australia
<b>Emergency Tel.</b>	<b>CHEMTREC®</b> <b>03 9757 4559 or +613 9757 4559</b>
<b>Telephone / Fax Numbers</b>	Tel: 1300 735 292 Fax: 1800 067 639
<b>E-mail address</b>	ANZinfo@thermofisher.com

**Recommended Use** Laboratory chemicals.

**Uses advised against** This product does not contain any substance(s) on the Illicit Drug Precursors/Reagents list. This product does not contain any substance(s) subject to Prohibition, Authorization or Restriction. This product does not contain any substance(s) listed on the voluntary National Code of Practice for Chemicals of Security Concern.

## Section 2 - Hazard(s) Identification

### Classification under Safe Work Australia

Classified as hazardous according to criteria of Safe Work Australia

#### Physical hazards

No hazards identified

#### Health hazards

Acute Inhalation Toxicity - Vapors  
Acute Inhalation Toxicity - Dusts and Mists  
Skin Corrosion/Irritation  
Serious Eye Damage/Eye Irritation  
Skin Sensitization

Category 3  
Category 3  
Category 1 B  
Category 1  
Category 1 Sub-category 1A

#### Environmental hazards

No hazards identified

### Label Elements



Skull and Crossbones



Corrosion

**Signal Word****Danger****Hazard Statements**

H314 - Causes severe skin burns and eye damage

H317 - May cause an allergic skin reaction

H331 - Toxic if inhaled

**Precautionary Statements**

P264 - Wash face, hands and any exposed skin thoroughly after handling

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

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

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting

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

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

P310 - Immediately call a POISON CENTER or doctor

P363 - Wash contaminated clothing before reuse

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

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

**Other information**

This product does not contain any known or suspected endocrine disruptors

## Section 3 - Composition and Information on Ingredients

Component	CAS No	Weight %
Polyethylene glycol	25322-68-3	>10
2-Methyl-3-isothiazolone	2682-20-4	>10
Malic acid	6915-15-7	>10
Citric acid monohydrate	5949-29-1	>10
Citrate, sodium, dihydrate	6132-04-3	>10
5-Chloro-2-methyl-3-isothiazolone	26172-55-4	>10

## Section 4 - First Aid Measures

**Inhalation**

Remove to fresh air.

**Ingestion**

Clean mouth with water and drink afterwards plenty of water.

**Skin Contact**

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

**Eye Contact**

Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

<b>Self-Protection of the First Aider</b>	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.
<b>First Aid Facilities</b>	Eyewash, safety shower and washroom.
<b>Most important symptoms and effects</b>	Causes eye burns. Causes severe eye damage. Causes burns by all exposure routes. May cause allergic skin reaction. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation: 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
<b>Notes to Physician</b>	Treat symptomatically.

## Section 5 - Fire Fighting Measures

### Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

### 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.

### 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

### Emergency procedures

Ensure adequate ventilation.

### Environmental Precautions

Do not flush into surface water or sanitary sewer system.

### Methods for Containment and Clean Up

#### Clean-up methods - small spillage

#### Clean-up methods - large spillage

Typically only supplied in small quantities as packaged goods.

If extremely toxic or used in larger quantities ensure a spillage action plan is in place. Evacuate area. Control the source and/or contain the spill if safe and able to do so. Use temporary diking, sand bags, dry sand, earth or proprietary booms/absorbent pads if available. Obtain advice on containment, neutralisation and clean-up from local emergency responders.

### Reference to Other Sections

Refer to protective measures listed in Sections 8 and 13.

## Section 7 - Handling and Storage

### Precautions for Safe Handling

Ensure adequate ventilation.

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

Keep containers tightly closed in a dry, cool and well-ventilated place. Corrosives area.

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

## Section 8 - Exposure Controls and Personal Protection

**Exposure limits**

DE - MAK and BAT values of Hazardous Chemical Compounds in the Work Area. Published by German Research Foundation on July 1, 2011

Component	Australia	New Zealand WEL	ACGIH TLV	The United Kingdom	Germany
Polyethylene glycol					TWA: 200 mg/m <sup>3</sup> (8 Stunden). AGW - exposure factor 2 TWA: 250 mg/m <sup>3</sup> (8 Stunden). MAK average molecular weight 200-600; because formation of a mist is possible, exposure should be minimized for reasons of occupational safety and hygiene Höhepunkt: 500 mg/m <sup>3</sup>
2-Methyl-3-isothiazol one					TWA: 0.2 mg/m <sup>3</sup> (8 Stunden). MAK mixture in ratio 1:3 with CAS 26172-55-4 Höhepunkt: 0.4 mg/m <sup>3</sup>
5-Chloro-2-methyl-3-i sothiazolone					TWA: 0.2 mg/m <sup>3</sup> (8 Stunden). MAK mixture in ratio 3:1 with CAS 2682-20-4 Höhepunkt: 0.4 mg/m <sup>3</sup>

**Biological limit values**

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

**Exposure Controls****Engineering Measures**

Ensure that eyewash stations and safety showers are close to the workstation location.

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

**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
Disposable gloves	See manufacturers recommendations	-	AS/NZS 2161	(minimum requirement)

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.

<b>Skin and body protection</b>	Long sleeved clothing
<b>Respiratory Protection</b>	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 and maintenance of respiratory protective devices (or AUS/NZ equivalent) When RPE is used a face piece Fit Test should be conducted
<b>Hygiene Measures</b>	Handle in accordance with good industrial hygiene and safety practice.
<b>Environmental exposure controls</b>	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

<b>Appearance</b>	Light yellow	
<b>Physical State</b>	Clear liquid	
<b>Odor</b>	No information available	
<b>Odor Threshold</b>	No data available	
<b>pH</b>	1.8-2.8	
<b>Melting Point/Range</b>	No data available	
<b>Softening Point</b>	No data available	
<b>Boiling Point/Range</b>	Not applicable	
<b>Flash Point</b>	Not applicable	<b>Method -</b> No information available
<b>Evaporation Rate</b>	No data available	
<b>Flammability (solid,gas)</b>	No information available	
<b>Explosion Limits</b>	No data available	
<b>Vapor Pressure</b>	No data available	
<b>Vapor Density</b>	No data available	(Air = 1.0)
<b>Specific Gravity / Density</b>	No data available	
<b>Bulk Density</b>	No data available	
<b>Water Solubility</b>	No information available	
<b>Solubility in other solvents</b>	No information available	
<b>Partition Coefficient (n-octanol/water)</b>		
<b>Component</b>	<b>log Pow</b>	
2-Methyl-3-isothiazolone	-0.26	
Malic acid	-1.26	
Citric acid monohydrate	-1.72	
5-Chloro-2-methyl-3-isothiazolone	0.75	
<b>Autoignition Temperature</b>	No data available	
<b>Decomposition Temperature</b>	No data available	
<b>Viscosity</b>	No data available	
<b>Explosive Properties</b>	No information available	
<b>Oxidizing Properties</b>	No information available	

### Other information

## Section 10 - Stability and Reactivity

<b>Reactivity</b>	None known, based on information available
<b>Stability</b>	Stable under normal conditions.
<b>Conditions to Avoid</b>	Heat, flames and sparks.

**Incompatible Materials** None known.

**Hazardous Decomposition Products** None under normal use conditions.

**Hazardous Polymerization** No information available.

## Section 11 - Toxicological Information

### Information on Toxicological Effects

#### Product Information

**(a) acute toxicity;**

**Oral**

Based on available data, the classification criteria are not met

**Dermal**

Based on available data, the classification criteria are not met

**Inhalation**

Based on available data, the classification criteria are not met

#### Toxicology data for the components

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Polyethylene glycol	LD50 = 22 g/kg ( Rat )	LD50 > 20 g/kg ( Rabbit )	
2-Methyl-3-isothiazolone	LD50 = 120 mg/kg ( Rat ) LD50 232 - 249 mg/kg ( Rat )	LD50 = 200 mg/kg ( Rabbit )	LC50 = 0.11 mg/L ( Rat ) 4 h
Malic acid	3500 mg/kg bw (Rat)	>20000 mg/kg bw (Rabbit)	>1.306 mg/L air (analytical) 4h (Rat)
Citric acid monohydrate	5.79 g/kg ( Mouse )		
Citrate, sodium, dihydrate	LD50 = 5400 mg/kg (Mouse) (OECD 401)	LD50 = > 2000 mg/kg (Rat) (OECD 402)	
5-Chloro-2-methyl-3-isothiazolone	LD50 = 481 mg/kg ( Rat )		LC50 = 1.23 mg/L ( Rat ) 4 h

**(b) skin corrosion/irritation;** Category 1 B

**(c) serious eye damage/irritation;** Category 1

**(d) respiratory or skin sensitization;**

**Respiratory**

No data available

**Skin**

Category 1

Component	Test method	Test species	Study result
Polyethylene glycol 25322-68-3 ( >10 )	in vivo: Test method Human Repeat Insult Patch Test	Man	non-sensitising
Citrate, sodium, dihydrate 6132-04-3 ( >10 )	Guinea Pig Maximisation Test (GPMT)	guinea pig	non-sensitising

**Sensitization**

No information available

**(e) germ cell mutagenicity;** No data available

Component	Test method	Test species	Study result
Polyethylene glycol 25322-68-3 ( >10 )	OECD Test Guideline 471	in vivo	negative
Citrate, sodium, dihydrate 6132-04-3 ( >10 )	OECD Test Guideline 471 Bacterial Reverse Mutation Test	in vitro Bacteria	negative
	Chromosomal aberration assay OECD Test Guideline 475	in vivo Rat	negative

**(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** Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation: 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 effects

Contains a substance which is: The product contains following substances which are hazardous for the environment. Very toxic to aquatic organisms.

Component	Freshwater Fish	Water Flea	Freshwater Algae	Microtox
Polyethylene glycol	LC50 > 100 mg/L 96h, (Poecilia reticulata) OECD Guideline 203	EC50 > 100 mg/L 48h, (Daphnia magna) OECD Guideline 202	EC50 > 100 mg/L 96h, (Scenedesmus subspicatus) OECD Guideline 201	
2-Methyl-3-isothiazolone	LC50: 0.07 mg/L/96h (Oncorhynchus mykiss)	EC50: 0.18 mg/L/48h		
Malic acid	LC50: > 100 mg/L 96h (OECD 203)	LC50 = 240 mg/L 48h (OECD 202)	EC50 > 100 mg/L 72h (OECD 201)	EC50 > 300mg/L 3h (OECD 209)
5-Chloro-2-methyl-3-isothiazolone	LC50: = 1.6 mg/L, 96h semi-static (Oncorhynchus mykiss)	EC50: = 4.71 mg/L, 48h (Daphnia magna) EC50: 0.12 - 0.3 mg/L, 48h Flow through (Daphnia magna) EC50: 0.71 - 0.99 mg/L, 48h Static (Daphnia magna)	EC50: 0.03 - 0.13 mg/L, 96h static (Pseudokirchneriella subcapitata) EC50: 0.11 - 0.16 mg/L, 72h static (Pseudokirchneriella subcapitata)	EC50 = 5.7 mg/L 16 h

### Persistence and Degradability

No information available

Component	Degradability
Citrate, sodium, dihydrate 6132-04-3 (>10)	93 % (Exposure Time: 0.25 d)(OECD 303 A) 90 % (Exposure Time: 30 d)(Closed Bottle test)

### Degradation in sewage treatment plant

Contains substances known to be hazardous to the environment or not degradable in waste water treatment plants.

### Bioaccumulative Potential

No information available

Component	log Pow	Bioconcentration factor (BCF)
2-Methyl-3-isothiazolone	-0.26	No data available
Malic acid	-1.26	No data available
Citric acid monohydrate	-1.72	No data available
5-Chloro-2-methyl-3-isothiazolone	0.75	No data available

### Mobility

No information available.

### Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors

### Persistent Organic Pollutant

This product does not contain any known or suspected substance

### Ozone Depletion Potential

This product does not contain any known or suspected substance

## Section 13 - Disposal Considerations

### Waste from Residues/Unused

Do not allow into drains or watercourses or dispose of where ground or surface waters may

<b>Products</b>	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.
<b>Contaminated Packaging</b>	Dispose of this container to hazardous or special waste collection point.
<b>Other Information</b>	Chemical wastes should be disposed through a licensed commercial waste collection service. Do not flush to sewer. Waste codes should be assigned by the user based on the application for which the product was used. Do not empty into drains. Large amounts will affect pH and harm aquatic organisms.

## Section 14 - Transport Information

<b>IMDG/IMO</b>	Not regulated
<b>ADG</b>	Not regulated
<b>IATA</b>	Not regulated
<b>Environmental hazards</b>	No hazards identified
<b>Special Precautions</b>	No special precautions required
<b>Additional information</b>	None known

## Section 15 - Regulatory Information

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

#### National Regulations                      **Australia**

See section 8 for national exposure control parameters.

#### **Standard for the Uniform Scheduling of Medicines and Poisons**

Classified as a scheduled poison according to the Standard for Uniform Scheduling of Medicines and Poisons.

<b>Component</b>	<b>Standard for the Uniform Scheduling of Medicines and Poisons</b>
Polyethylene glycol - 25322-68-3	Schedule 2 listed Schedule 3 listed
2-Methyl-3-isothiazolone - 2682-20-4	Schedule 6 listed - except: in rinse-off cosmetic preparations or therapeutic goods intended for topical rinse-off application containing $\leq 0.0015\%$ of Methylisothiazolinone, or in other preparations that are not intended for direct application to the skin containing $\leq 0.1\%$ of Methylisothiazolinone
Citrate, sodium, dihydrate - 6132-04-3	Schedule 5 listed - being the Carbonate, Silicate or Phosphate salts of Sodium or Potassium alone or in any combination: in solid orthodontic device cleaning preparations as an in-use aqueous solution; in solid automatic dishwashing preparations in a 500 g/L aqueous solution or mixture but with pH $\leq 12.5$ ; in other solid preparations in a 10 g/L aqueous solution, or in liquid or semi-solid preparations, unless in food additive preparations for domestic use, or in automatic dish washing preparations for domestic use with a pH $> 12.5$ ; except when separately specified in these Schedules
5-Chloro-2-methyl-3-isothiazolone - 26172-55-4	Schedule 6 listed - except: in rinse-off cosmetic preparations or therapeutic goods intended for topical rinse-off application containing $\leq 0.0015\%$ of Methylchloroisothiazolinone and Methylisothiazolinone in total, or in other preparations that are not intended for direct application to the skin containing $\leq 0.1\%$ of Methylchloroisothiazolinone and Methylisothiazolinone in total

#### **Australian Industrial Chemicals Introduction Scheme (AICIS)**



Component	Australian Industrial Chemicals Introduction Scheme (AICIS)	Additional information
Polyethylene glycol - 25322-68-3	Present	-
2-Methyl-3-isothiazolone - 2682-20-4	Present	-
Malic acid - 6915-15-7	Present	-
Citric acid monohydrate - 5949-29-1	Present	-
Citrate, sodium, dihydrate - 6132-04-3	Present	-
5-Chloro-2-methyl-3-isothiazolone - 26172-55-4	Present	-

**Australian - Illicit Drug Precursors/Reagents Substance List**

This product does not contain any substance(s) on the Illicit Drug Precursors/Reagents list.

**Chemicals of Security Concern**

This product does not contain any substance(s) listed on the voluntary National Code of Practice for Chemicals of Security Concern

**National pollutant inventory** Not applicable

**Prohibition or notification/licensing requirements**

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

This product does not contain any substance(s) subject to Prohibition, Authorization or Restriction.

**International Inventories**

Component	AICS	NZIoC	EINECS	ELINCS	TSCA	DSL	NDSL	PICCS	ENCS	ISHL	IECSC	KECL
Polyethylene glycol	X	X	-	-	X	X	-	X	X	X	X	KE-20228
2-Methyl-3-isothiazolone	X	X	220-239-6	-	X	X	-	X	X	X	X	KE-24316
Malic acid	X	X	230-022-8	-	X	X	-	X	X	X	X	KE-20414
Citric acid monohydrate	X	X	-	-	-	X	-	X	X	X	X	-
Citrate, sodium, dihydrate	X	X	-	-	-	-	-	X	X		X	-
5-Chloro-2-methyl-3-isothiazolone	X	X	247-500-7	-	X	X	-	X	X	X	X	KE-05736

**Legend:** X - Listed, '-' - Not Listed. PMN - Indicates a commenced PMN substance. SP - Indicates a substance that is identified in a proposed SNUR. XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B)). **KECL** - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)

**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

**Basel convention on the control of transboundary movements of hazardous wastes and their disposal**

Not applicable.

Component	CAS No	OECD HPV	Restriction of Hazardous Substances (RoHS)	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements
Polyethylene glycol	25322-68-3	Listed	Not applicable	Not applicable	Not applicable
2-Methyl-3-isothiazolone	2682-20-4	Listed	Not applicable	Not applicable	Not applicable
Malic acid	6915-15-7	Listed	Not applicable	Not applicable	Not applicable
Citric acid monohydrate	5949-29-1	Not applicable	Not applicable	Not applicable	Not applicable
Citrate, sodium, dihydrate	6132-04-3	Not applicable	Not applicable	Not applicable	Not applicable
5-Chloro-2-methyl-3-isothiazolone	26172-55-4	Listed	Not applicable	Not applicable	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)
2-Methyl-3-isothiazolone	-	Use restricted. See item 75. (see link for restriction details)	-

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

## Section 16 - Other Information

### Legend

<b>AICS</b> - Australian Inventory of Chemical Substances	<b>NZIoC</b> - New Zealand Inventory of Chemicals
<b>TSCA</b> - United States Toxic Substances Control Act Section 8(b) Inventory	<b>EINECS/ELINCS</b> - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
<b>DSL/NDL</b> - Canadian Domestic Substances List/Non-Domestic Substances List	<b>ENCS</b> - Japanese Existing and New Chemical Substances
<b>IECSC</b> - Chinese Inventory of Existing Chemical Substances	<b>KECL</b> - Korean Existing and Evaluated Chemical Substances
<b>PICCS</b> - Philippines Inventory of Chemicals and Chemical Substances	<b>CAS</b> - Chemical Abstracts Service
<b>TWA</b> - Time Weighted Average	<b>ACGIH</b> - American Conference of Governmental Industrial Hygienists
<b>IARC</b> - International Agency for Research on Cancer	Predicted No Effect Concentration (PNEC)
<b>ICAO/IATA</b> - International Civil Aviation Organization/International Air Transport Association	<b>IMO/MDG</b> - International Maritime Organization/International Maritime Dangerous Goods Code
<b>MARPOL</b> - International Convention for the Prevention of Pollution from Ships	<b>ADG</b> - Australian Code for the Transport of Dangerous Goods by Road and Rail
<b>NZS 5433:2020</b> - Transport of Dangerous Goods on Land	<b>OECD</b> - Organisation for Economic Co-operation and Development
<b>LD50</b> - Lethal Dose 50%	<b>LC50</b> - Lethal Concentration 50%
<b>EC50</b> - Effective Concentration 50%	<b>ATE</b> - Acute Toxicity Estimate
<b>WEL</b> - Workplace Exposure Limit	<b>RPE</b> - Respiratory Protective Equipment
<b>DNEL</b> - Derived No Effect Level	<b>NOEC</b> - No Observed Effect Concentration
<b>POW</b> - Partition coefficient Octanol:Water	<b>BCF</b> - Bioconcentration factor
<b>vPvB</b> - very Persistent, very Bioaccumulative	<b>PBT</b> - Persistent, Bioaccumulative, Toxic
<b>VOC</b> - (Volatile Organic Compound)	

#### Key literature references and sources for data

<https://echa.europa.eu/information-on-chemicals>  
Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

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

<b>Physical hazards</b>	On basis of test data
<b>Health Hazards</b>	Calculation method
<b>Environmental hazards</b>	Calculation method

#### Training Advice

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

Revision Date 14-Jul-2023  
Revision Summary Update to GHS format.

**This Safety Data Sheet (SDS) is prepared in accordance to and complies with the requirements of Safe Work Australia - Work Health and Safety Regulations (WHS Regulations).**

**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**