

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

### Section 1 - Identification

Product Name <u>Hydrazin hydrate</u>

CAS No 10217-52-4

Product Code 802595

Address ThermoFisher Scientific Australia Pty Ltd

5 Caribbean Drive, Scoresby VICTORIA 3179, Australia

Emergency Tel. CHEMTREC®

03 9757 4559 or +613 9757 4559

**Telephone / Fax Numbers** Tel: 1300 735 292

Fax: 1800 067 639

E-mail address 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 Oral ToxicityCategory 3Acute Dermal ToxicityCategory 3Acute Inhalation Toxicity - VaporsCategory 2Skin Corrosion/IrritationCategory 1 BSerious Eye Damage/Eye IrritationCategory 1Skin SensitizationCategory 1CarcinogenicityCategory 1B

### **Environmental hazards**

Acute aquatic toxicity
Chronic aquatic toxicity
Category 1
Category 1

#### **Label Elements**

ALFAA802595 Version 2 20-Nov-2022 Page 1/11







Health Hazard



Corrosion



Environment

#### Signal Word

#### Danger

#### **Hazard Statements**

H314 - Causes severe skin burns and eye damage

H317 - May cause an allergic skin reaction

H330 - Fatal if inhaled

H350 - May cause cancer

H410 - Very toxic to aquatic life with long lasting effects

H301 + H311 - Toxic if swallowed or in contact with skin

Combustible liquid

### **Precautionary Statements**

P201 - Obtain special instructions before use

P202 - Do not handle until all safety precautions have been read and understood

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

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

P270 - Do not eat, drink or smoke when using this product

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

P284 - Wear respiratory protection

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

P330 - Rinse mouth

P331 - Do NOT induce vomiting

P363 - Wash contaminated clothing before reuse

P370 + P378 - In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish

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

P405 - Store locked up

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

#### Other information

Toxic to terrestrial vertebrates

# Section 3 - Composition and Information on Ingredients

Component	CAS No	Weight %		
Hydrazine (hydrate)	10217-52-4	100		
Hydrazine	302-01-2	-		

## Section 4 - First Aid Measures

ALFAA802595 Version 2 20-Nov-2022 Page 2/11

**Inhalation** If not breathing, give artificial respiration. Do not use mouth-to-mouth method if victim

ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Remove to fresh

air. Immediate medical attention is required.

**Ingestion** Do NOT induce vomiting. Call a physician or poison control center immediately.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. Immediate medical

attention is required.

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

the case of contact with eyes, rinse immediately with plenty of water and seek medical

advice.

General Advice Show this safety data sheet to the doctor in attendance. Immediate medical attention is

required.

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 burns by all exposure routes. Difficulty in breathing. May cause allergic skin reaction. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting: 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: Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated

Notes to Physician Treat symptomatically.

## Section 5 - Fire Fighting Measures

#### **Suitable Extinguishing Media**

Water spray. Carbon dioxide (CO<sub>2</sub>). Dry chemical. Chemical foam. Water mist may be used to cool closed containers. CO<sub>2</sub>, dry chemical, dry sand, alcohol-resistant foam.

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

No information available.

#### **Hazardous Decomposition Products**

Nitrogen oxides (NOx), Ammonia, Hydrogen.

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

Thermal decomposition can lead to release of irritating gases and vapors. The product causes burns of eyes, skin and mucous membranes. Combustible material. Containers may explode when heated. Do not allow run-off from fire-fighting to enter drains or water courses.

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

## Section 6 - Accidental Release Measures

#### **Emergency procedures**

Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Remove all sources of ignition. Take precautionary measures against static discharges.

#### **Environmental Precautions**

ALFAA802595 Version 2 20-Nov-2022 Page 3 / 11

Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

#### Methods for Containment and Clean Up

#### Clean-up methods - small spillage

Keep in suitable, closed containers for disposal. Soak up with inert absorbent material. Remove all sources of ignition.

#### Clean-up methods - large spillage

Typically only supplied is small quantiites 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**

Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Use only under a chemical fume hood. Do not breathe mist/vapors/spray. Do not ingest. If swallowed then seek immediate medical assistance. Keep away from open flames, hot surfaces and sources of ignition.

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

Store under an inert atmosphere. Corrosives area. Keep away from heat, sparks and flame. Keep containers tightly closed in a dry, cool and well-ventilated place.

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

#### **Exposure limits**

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 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. UK - EH40/2005 Work Exposure Limits, Fourth edition. Published 2020. 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
Hydrazine	TWA: 0.01 ppm	TWA: 0.0002 ppm	TWA: 0.01 ppm	STEL: 0.03 ppm 15 min	Haut
	TWA: 0.013 mg/m <sup>3</sup>	TWA: 0.00026 mg/m <sup>3</sup>	Skin	STEL: 0.039 mg/m <sup>3</sup> 15	
		Skin		min	
				TWA: 0.01 ppm 8 hr	
				TWA: 0.013 mg/m <sup>3</sup> 8 hr	
				Carc.	
				Skin	

#### **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 adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location. Use explosion-proof electrical/ventilating/lighting equipment.

ALFAA802595 Version 2 20-Nov-2022 Page 4 / 11

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
Natural rubber	See manufacturers	-	AS/NZS 2161	(minimum requirement)
Nitrile rubber	recommendations			
Neoprene				
PVC				

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

and maintenance of repiratory protective devices

Recommended Filter type: Particulates filter conforming to EN 143 Inorganic gases and vapours filter Type B Grey

conforming to EN14387 (or AUS/NZ equivalent)
Particle filtering: EN149:2001 (or AUS/NZ equivalent)

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

When PRE is used a free piece Eit Test should be conducted.

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

Appearance Colorless
Physical State Liquid

Odor No information available

Odor Threshold No data available

**pH** 12 640 g/l aq.sol

Melting Point/Range -51.5 °C / -60.7 °F

Softening Point No data available
Boiling Point/Range 120.1 °C / 248.2 °F

Flash Point 75 °C / 167 °F Method - No information available

Evaporation Rate No data available

Flammability (solid,gas) Not applicable Liquid Explosion Limits Lower 3.4 Vol%

Vapor Pressure Upper 100 Vol% 10 mbar @ 20 °C

Vapor Density No data available (Air = 1.0)

Specific Gravity / Density 1.032

Bulk Density Not applicable Liquid

Water Solubility Miscible

ALFAA802595 Version 2 20-Nov-2022 Page 5 / 11

Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

Component log Pow Hydrazine -0.16

Autoignition Temperature 280 °C / 536 °F

Decomposition Temperature No data available

Viscosity 1.50 mPa s at 20 °C

**Explosive Properties** 

Oxidizing Properties No information available

explosive air/vapour mixtures possible

Other information

Molecular Formula H4 N2 . X H2 O

Molecular Weight 32.04

# Section 10 - Stability and Reactivity

Reactivity None known, based on information available

**Stability** Do not allow evaporation to dryness. Air sensitive.

Conditions to Avoid Heat, flames and sparks, Exposure to air, Incompatible products, Keep away from open

flames, hot surfaces and sources of ignition.

Incompatible Materials Acids, Bases, Finely powdered metals, Halogens, nitrogen oxides (NOx), Organic materials,

Peroxides, Lead, Metals, copper, Butyl rubber.

Hazardous Decomposition Products Nitrogen oxides (NOx). Ammonia. Hydrogen.

**Hazardous Polymerization** Hazardous polymerization does not occur.

# Section 11 - Toxicological Information

#### Information on Toxicological Effects

### **Product Information**

(a) acute toxicity;

OralCategory 3DermalCategory 3InhalationCategory 2

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Hydrazine	LD50 = 60 mg/kg (Rat)	LD50 = 91 mg/kg (Rabbit)	570 ppm (Rat) 4 h
			0.75 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

**Sensitization** No information available

(e) germ cell mutagenicity; No data available

ALFAA802595 Version 2 20-Nov-2022 Page 6 / 11

(f) carcinogenicity; Category 1B

> Possible cancer hazard. May cause cancer based on animal data The table below indicates whether each agency has listed any ingredient as a carcinogen

Component	Australia	New Zealand	New South Wales	Western Australia	IARC	EU	UK	Germany
Hydrazine		Suspected			Group 2A	Carc Cat. 1B		Cat. 2
		carcinogen						

(g) reproductive toxicity; No data available

(h) STOT-single exposure; No data available

No data available (i) STOT-repeated exposure;

**Target Organs** No information available.

No data available (j) aspiration hazard;

delayed

Symptoms / effects,both acute and Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting: 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: Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated

# Section 12 - Ecological Information

**Ecotoxicity effects** 

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The product contains following substances which are hazardous for the environment.

Component	Freshwater Fish	Water Flea	Freshwater Algae	Microtox
Hydrazine (hydrate)				EC50 = 0.01 mg/L 15
				min
				EC50 = 0.01 mg/L 20
				min
				EC50 = 0.02  mg/L  5  min
Hydrazine	LC50: 0.28 - 1.34 mg/L,		EC50: = $0.006 \text{ mg/L}$ ,	EC50 = 0.01 mg/L 15
	96h static (Poecilia		72h static	min
	reticulata)		(Pseudokirchneriella	EC50 = 0.01 mg/L 20
	LC50: 1.81 - 2.79 mg/L,		subcapitata)	min
	96h flow-through		EC50: = 0.02 mg/L, 96h	EC50 = 0.02 mg/L 5 min
	(Pimephales promelas)		static	
	LC50: = 1.17 mg/L, 96h		(Pseudokirchneriella	
	(Lepomis macrochirus)		subcapitata)	
	LC50: 0.54 - 1.31 mg/L,		EC50: = $0.071 \text{ mg/L}$ ,	
	96h static (Lepomis		72h	
	macrochirus)		(Pseudokirchneriella	
	LC50: 0.7 - 1.3 mg/L,		subcapitata)	
	96h flow-through			
	(Lepomis macrochirus)			
	,			

Persistence and Degradability

**Persistence** 

Soluble in water, Persistence is unlikely, based on information available, Miscible with

Degradability Not relevant for inorganic substances.

Degradation in sewage treatment plant **Bioaccumulative Potential** 

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

Bioaccumulation is unlikely

Component	log Pow	Bioconcentration factor (BCF)
Hydrazine	-0.16	No data available
Mobility	The product is water soluble, and may spread	in water systems. : Will likely be mobile in

**ALFAA802595** Version 2 20-Nov-2022 Page 7/11

Endocrine Disruptor Information Persistent Organic Pollutant Ozone Depletion Potential the environment due to its water solubility Highly mobile in soils

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

## Section 13 - Disposal Considerations

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

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. Solutions with high pH-value must be neutralized before discharge. Do not let this chemical enter the environment.

## Section 14 - Transport Information

#### IMDG/IMO

UN-No UN2030

Proper Shipping Name HYDRAZINE, AQUEOUS SOLUTION

Hazard Class 8
Subsidiary Hazard Class 6.1
Packing Group II

#### ADG

UN-No UN2030

Proper Shipping Name HYDRAZINE AQUEOUS SOLUTION

Hazard Class 8
Subsidiary Hazard Class 6.1
Packing Group ||

Component	Hazchem Code
Hydrazine	2X
302-01-2 ( - )	2WE

#### <u>IATA</u>

UN-No UN2030

Proper Shipping Name HYDRAZINE, AQUEOUS SOLUTION

Hazard Class 8
Subsidiary Hazard Class 6.1
Packing Group ||

**Environmental hazards** Dangerous for the environment

Product is a marine pollutant according to the criteria set by IMDG/IMO

Special Precautions No special precautions required

Additional information None known

# Section 15 - Regulatory Information

ALFAA802595 Version 2 20-Nov-2022 Page 8 / 11

#### 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.

Component	Standard for the Uniform Scheduling of Medicines and Poisons
Hydrazine - 302-01-2	Schedule 6 listed - present

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

Component	Australian Industrial Chemicals Introduction Scheme (AICIS)	Additional information
Hydrazine - 302-01-2	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 licencing requirements when they apply.

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

Component	Australia	New South Wales	Western Australia	New Zealand
Hydrazine - 302-01-2				Suspected carcinogen

#### **International Inventories**

Component	AICS	NZIoC	EINECS	ELINCS	TSCA	DSL	NDSL	PICCS	<b>ENCS</b>	ISHL	IECSC	KECL
Hydrazine (hydrate)	-	Х	-	-	-	-	-	-	Х	Х	Х	-
Hydrazine	Х	Х	206-114-9	-	Х	Х	-	Х	Х	Х	Х	KE-19981

Legend: X - Listed. '-' - Not Listed. 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

ALFAA802595 Version 2 20-Nov-2022 Page 9/11

Basel convention on the control of transboundary movements of hazardous wastes and their dispoal 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
Hydrazine (hydrate)	10217-52-4	Not applicable	Not applicable	Not applicable	Not applicable
Hydrazine	302-01-2	Listed	Not applicable	0.5 tonne	2 tonne

### 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	, , ,
Hydrazine	-	Use restricted. See item 28. (see link for restriction details) Use restricted. See item 75. (see link for restriction details)	SVHC Candidate list - 206-114-9 - Carcinogenic, Article 57a

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

## Section 16 - Other Information

#### Legend

AICS - Australian Inventory of Chemical Substances

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

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

 $\ensuremath{\mathsf{MARPOL}}$  - International Convention for the Prevention of Pollution from Ships

NZS 5433:2012 - Transport of Dangerous Goods on Land

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)

NZIoC - New Zealand Inventory of Chemicals

**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

Predicted No Effect Concentration (PNEC)

**IMO/IMDG** - International Maritime Organization/International Maritime Dangerous Goods Code

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

**OECD** - Organisation for Economic Co-operation and Development

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

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

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

#### **Training Advice**

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

ALFAA802595 Version 2 20-Nov-2022 Page 10 / 11

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.

Revision Date 20-Nov-2022 Revision Summary Initial Release.

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**

ALFAA802595 Version 2 20-Nov-2022 Page 11 / 11