

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

Section 1 - Identification

Product Identifier

Product Name	<u>Hydrazine</u>
Molecular Formula	H4 N2 . x H2 O
Molecular Weight	32.04
Recommended Use	Laboratory chemicals.
Uses advised against	No Information available

Product Code	AJA1093
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

HSNO Approval Number **HSR007167**

GHS Classification

Physical hazards

Flammable liquids Category 3

Health hazards

Acute Oral Toxicity	Category 2
Acute Dermal Toxicity	Category 3
Acute Inhalation Toxicity - Vapors	Category 2
Skin Corrosion/Irritation	Category 1 A
Serious Eye Damage/Eye Irritation	Category 1
Skin Sensitization	Category 1
Germ Cell Mutagenicity	Category 1
Carcinogenicity	Category 1B
Reproductive Toxicity	Category 2

Environmental hazards

Acute aquatic toxicity Category 1

Chronic aquatic toxicity

Category 1

Label Elements**Signal Word****Danger****Hazard Statements**

H311 - Toxic in contact with skin
 H314 - Causes severe skin burns and eye damage
 H317 - May cause an allergic skin reaction
 H350 - May cause cancer
 H410 - Very toxic to aquatic life with long lasting effects
 H226 - Flammable liquid and vapor
 H340 - May cause genetic defects
 H361 - Suspected of damaging fertility or the unborn child
 H300 + H330 - Fatal if swallowed or if inhaled

Precautionary Statements**Prevention**

P201 - Obtain special instructions before use
 P202 - Do not handle until all safety precautions have been read and understood
 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
 P273 - Avoid release to the environment

Response

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
 P391 - Collect spillage

Storage

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed
 P405 - Store locked up

Disposal

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

Other hazards which do not result in classification

Toxic to terrestrial vertebrates
 This product does not contain any known or suspected endocrine disruptors

Section 3 - Composition and Information on Ingredients

Component	CAS No	Weight %
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Hydrazine hydrate	10217-52-4	50 - 75
Hydrazine	302-01-2	-

Section 4 - First Aid Measures

Description of first aid measures

New Zealand Emergency Tel.	CHEMTREC® 09 980 6780 or +64 9 980 6780
Inhalation	Remove from exposure, lie down. Remove to fresh air. If not breathing, give artificial respiration. Immediate medical attention is required.
Eye Contact	Immediate medical attention is required. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Skin Contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Immediate medical attention is required.
Ingestion	Call a physician immediately. Clean mouth with water.
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. 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
Notes to Physician	Treat symptomatically.

Section 5 - Fire Fighting Measures

Suitable Extinguishing Media

Water spray. Carbon dioxide (CO₂). Dry chemical. Chemical foam.

Extinguishing media which must not be used for safety reasons

No information available.

Specific Hazards Arising from the Chemical

Do not allow run-off from fire-fighting to enter drains or water courses.

Hazardous Combustion Products

Nitrogen oxides (NO_x), Ammonia, Hydrogen.

Decomposition Temperature

> 250°C

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. Avoid contact with skin, eyes and inhalation of vapors. Remove all sources of ignition. Wear protective gloves/clothing and eye/face protection. In case of inadequate ventilation wear respiratory protection.

Environmental Precautions

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

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal. Do not flush into surface water or sanitary sewer system.

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**

Handle product only in closed system or provide appropriate exhaust ventilation. Do not breathe mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Wear personal protective equipment/face protection.

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 away from oxidizing agents. Keep away from heat, sparks and flame. Keep containers tightly closed in a cool, well-ventilated place. Keep refrigerated. Protect from light. Protect from sunlight. Keep containers tightly closed in a dry, cool and well-ventilated place. Corrosives area.

Incompatible Materials

Acids. Bases. Finely powdered metals. Halogens. nitrogen oxides (NOx). Organic materials. Peroxides. Lead. Metals. copper. Butyl rubber.

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

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.

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.

Component	New Zealand WEL	Australia	ACGIH TLV	The United Kingdom
Hydrazine	TWA: 0.0002 ppm	TWA: 0.01 ppm	TWA: 0.01 ppm	STEL: 0.03 ppm 15 min

	TWA: 0.00026 mg/m ³ Skin	TWA: 0.013 mg/m ³	Skin	STEL: 0.039 mg/m ³ 15 min TWA: 0.01 ppm 8 hr TWA: 0.013 mg/m ³ 8 hr Carc. Skin
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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. 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

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
Nitrile rubber, Neoprene.	> 480 minutes	0.1 - 0.2 mm	AS/NZS 2161	As tested under EN374-3 Determination of Resistance to Permeation by Chemicals
	> 480 minutes	0.38 mm		
Neoprene gloves	> 480 minutes	0.45 mm		
Viton (R)	> 480 minutes	0.30 mm		

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 Wear appropriate protective gloves and clothing to prevent skin exposure

Respiratory 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 respiratory protective devices

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

Recommended half mask:- Particle filtering: EN149:2001 (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

Physical State	Liquid
Appearance	Colorless
Odor	Ammonia-like
Odor Threshold	No data available

pH	Not applicable	(1%)
Melting Point/Range	-65 °C / -85 °F	
Softening Point	No data available	
Boiling Point/Range	120 °C / 248 °F	
Flammability (liquid)	No data available	
Flammability (solid,gas)	Not applicable	Liquid
Explosion Limits	Lower 9.3 Upper 83.4	
Flash Point	Not applicable °C / °F	Method - Open cup
Autoignition Temperature	310 °C / 590 °F	
Decomposition Temperature	> 250°C	
Viscosity	1.26 mPa.s at 20 °C	
Water Solubility	Miscible	
Solubility in other solvents	No information available	
Partition Coefficient (n-octanol/water)		
Component	log Pow	
Hydrazine	-0.16	
Vapor Pressure	15 mbar @ 20 °C	
Density / Specific Gravity	1.023	
Bulk Density	Not applicable	Liquid
Vapor Density	1.1 @ 15 °C	(Air = 1.0)
Particle characteristics	Not applicable (liquid)	

Other information

Molecular Formula	H4 N2 . x H2 O
Molecular Weight	32.04
Explosive Properties	Not explosive

Section 10 - Stability and Reactivity

Reactivity	Yes
Stability	Do not allow evaporation to dryness. Air sensitive.
Sensitivity to Mechanical Impact	No information available
Sensitivity to Static Discharge	No information available
Hazardous Polymerization	Hazardous polymerization does not occur.
Hazardous Reactions	No information available.
Conditions to Avoid	Exposure to air, Incompatible products.
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.

Section 11 - Toxicological Information

Acute Effects**Information on likely routes of exposure****Product Information**

Inhalation	Not an expected route of exposure.
Eyes	Not an expected route of exposure.
Skin	No known effect based on information supplied.

Ingestion Not an expected route of exposure.

Numerical measures of toxicity

(a) acute toxicity;
Oral Category 3
 ATE = 244.1 mg/kg
Dermal Category 3
Inhalation Category 2

Toxicology data for the components

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Hydrazine hydrate	LD50 = 108 mg/kg bw (Rat) OECD TG 401		
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; Based on available data, the classification criteria are not met

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

(g) reproductive toxicity; Based on available data, the classification criteria are not met

(h) STOT-single exposure; Based on available data, the classification criteria are not met

(i) STOT-repeated exposure; Based on available data, the classification criteria are not met

Test species / Duration Rat
Study result LOAEL = 0.66 mg/m³
 NOAEL = 1.92 mg/kg
Target Organs None known.

(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

Aquatic ecotoxicity

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	LC50: 0.28 - 1.34 mg/L, 96h static (Poecilia reticulata) LC50: 1.81 - 2.79 mg/L, 96h flow-through (Pimephales promelas) LC50: = 1.17 mg/L, 96h (Lepomis macrochirus) LC50: 0.54 - 1.31 mg/L, 96h static (Lepomis macrochirus) LC50: 0.7 - 1.3 mg/L, 96h flow-through (Lepomis macrochirus)		EC50: = 0.006 mg/L, 72h static (Pseudokirchneriella subcapitata) EC50: = 0.071 mg/L, 72h (Pseudokirchneriella subcapitata) EC50: = 0.02 mg/L, 96h static (Pseudokirchneriella subcapitata)	EC50 = 0.01 mg/L 15 min EC50 = 0.01 mg/L 20 min EC50 = 0.02 mg/L 5 min

Terrestrial ecotoxicity

There is no data for this product

Persistence and Degradability

Persistence

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

Degradation in sewage treatment plant

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

Bioaccumulative Potential

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 the environment due to its water solubility. Highly mobile in soils

Other adverse effects

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

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 . 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. Do not let this chemical enter the environment.

Section 14 - Transport Information

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

NZS 5433:2020

UN-No	UN2030
Proper Shipping Name	HYDRAZINE AQUEOUS SOLUTION
Technical Shipping Name	Hydrazine hydrate Solution
Hazard Class	8
Subsidiary Hazard Class	8, 6.1
Packing Group	II

IATA

UN-No	UN2030
Proper Shipping Name	HYDRAZINE, AQUEOUS SOLUTION
Technical Shipping Name	Hydrazine hydrate Solution
Hazard Class	8
Subsidiary Hazard Class	6.1
Packing Group	II

IMDG/IMO

UN-No	UN2030
Proper Shipping Name	HYDRAZINE, AQUEOUS SOLUTION
Technical Shipping Name	Hydrazine hydrate Solution
Hazard Class	8
Subsidiary Hazard Class	6.1
Packing Group	II

Environmental hazards	Dangerous for the environment Product is a marine pollutant according to the criteria set by IMDG/IMO
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Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable, packaged goods
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Special Precautions	No special precautions required. Please refer to the applicable dangerous goods regulations for additional information.
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Additional information	None known
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Section 15 - Regulatory Information

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

HSNO Approval Number	HSR007167
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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 licensing requirements when they apply.

Component	New Zealand
Hydrazine	Suspected carcinogen

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

Component	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	IMDG Marine Pollutant
Hydrazine	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	REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
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/candidate-list-table>

<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 (ENCS), Japan (ISHL), Canada (DSL/NDL), Philippines (PICCS). US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

Component	CAS No	NZIoC	AICS	EINECS	ELINCS	NLP	KECL	IECSC	TCSI
Hydrazine hydrate	10217-52-4	X	-	-	-	-	-	X	X
Hydrazine	302-01-2	X	X	206-114-9	-	-	KE-19981	X	X

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	DSL	NDL	PICCS	ISHL	ENCS
Hydrazine hydrate	10217-52-4	-	-	-	-	-	X	X
Hydrazine	302-01-2	X	ACTIVE	X	-	X	X	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	AICS - Australian Inventory of Chemical Substances
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory	EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List	ENCS - Japanese Existing and New Chemical Substances
IECSC - Chinese Inventory of Existing Chemical Substances	KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances	CAS - Chemical Abstracts Service
TWA - Time Weighted Average	ACGIH - American Conference of Governmental Industrial Hygienists
IARC - International Agency for Research on Cancer	PNEC - Predicted No Effect Concentration
NZS 5433:2020 - Transport of Dangerous Goods on Land	OECD - Organisation for Economic Co-operation and Development
ICAO/IATA - International Civil Aviation Organization/International Air Transport Association	IMO/MDG - International Maritime Organization/International Maritime Dangerous Goods Code
MARPOL - International Convention for the Prevention of Pollution from Ships	ADG - Australian Code for the Transport of Dangerous Goods by Road and Rail
LD50 - Lethal Dose 50%	LC50 - Lethal Concentration 50%
EC50 - Effective Concentration 50%	ATE - Acute Toxicity Estimate
WEL - Workplace Exposure Limit	RPE - Respiratory Protective Equipment
DNEL - Derived No Effect Level	NOEC - No Observed Effect Concentration
POW - Partition coefficient Octanol:Water	BCF - Bioconcentration factor
vPvB - very Persistent, very Bioaccumulative	PBT - Persistent, Bioaccumulative, Toxic
VOC - (Volatile Organic Compound)	

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.
Chemical incident response training.

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

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