

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

# Section 1 - Identification

Product Name Chromerge cleaning solution

Synonyms None

Product Code C577-12; C577-12A; S799641

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

Verify requirements related to using, handling and storing these substances. This product

contains one or more 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

Oxidizing liquids Category 1

## **Health hazards**

**Acute Oral Toxicity** Category 3 Category 1 **Acute Dermal Toxicity** Acute Inhalation Toxicity - Vapors Category 2 Skin Corrosion/Irritation A Category 1 Serious Eye Damage/Eye Irritation Category 1 Respiratory Sensitization Category 1 Skin Sensitization Category 1 Germ Cell Mutagenicity Category 1B Carcinogenicity Category 1A Reproductive Toxicity Category 2 Specific target organ toxicity - (single exposure) Category 3 Specific target organ toxicity - (repeated exposure) Category 1

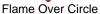
## **Environmental hazards**

Acute aquatic toxicity
Chronic aquatic toxicity
Category 1
Category 1

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## **Label Elements**







Skull and Crossbones



Health Hazard



Corrosion





Signal Word

### **Danger**

### **Hazard Statements**

- H335 May cause respiratory irritation
- H340 May cause genetic defects
- H271 May cause fire or explosion; strong oxidizer
- H301 Toxic if swallowed
- H314 Causes severe skin burns and eye damage
- H317 May cause an allergic skin reaction
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled
- H350 May cause cancer
- H361 Suspected of damaging fertility or the unborn child
- H372 Causes damage to organs through prolonged or repeated exposure
- H410 Very toxic to aquatic life with long lasting effects
- H310 + H330 Fatal in contact with skin or if inhaled

## **Precautionary Statements**

- P201 Obtain special instructions before use
- P260 Do not breathe dust/fume/gas/mist/vapors/spray
- 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
- P220 Keep away from clothing and other combustible materials
- P221 Take any precaution to avoid mixing with combustibles
- P262 Do not get in eyes, on skin, or on clothing
- 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
- P283 Wear fire resistant or flame retardant clothing
- P284 In case of inadequate ventilation wear respiratory protection
- P331 Do NOT induce vomiting
- 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
- P306 + P360 IF ON CLOTHING: Rinse immediately contaminated clothing and skin with plenty of water before removing clothes
- P310 Immediately call a POISON CENTER or doctor
- P330 Rinse mouth
- P353 Rinse skin with water or shower
- P363 Wash contaminated clothing before reuse
- P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish
- P371 + P380 + P375 In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion
- P302 + P352 IF ON SKIN: Wash with plenty of soap and water
- 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

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### Other information

Toxicity to Soil Dwelling Organisms
Toxic to terrestrial vertebrates

# Section 3 - Composition and Information on Ingredients

Component	CAS No	Weight %
Water	7732-18-5	50
Chromium trioxide (CrO3)	1333-82-0	50

# Section 4 - First Aid Measures

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. May cause allergy or asthma symptoms or breathing difficulties if inhaled. 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**

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**

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

### Specific Hazards Arising from the Chemical

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Thermal decomposition can lead to release of irritating gases and vapors. The product causes burns of eyes, skin and mucous membranes. Oxidizer: Contact with combustible/organic material may cause fire. May ignite combustibles (wood paper, oil, clothing, etc.). 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**

Use personal protective equipment as required. Ensure adequate ventilation. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

#### **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

### Clean-up methods - small spillage

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Sweep up and shovel into suitable containers for disposal.

### 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 clothing and other combustible materials.

### Conditions for Safe Storage, Including any Incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. Do not store near combustible materials. Corrosives area.

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

# 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
Chromium trioxide	TWA: 0.05 mg/m <sup>3</sup>		TWA: 0.0002 mg/m <sup>3</sup>	STEL: 0.03 mg/m <sup>3</sup> 15	Haut

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(CrO3)	STEL: 0.0005 mg/m <sup>3</sup>	min	
` ′	Skin	STEL: 0.065 mg/m <sup>3</sup> 15	
		min	
		TWA: 0.01 mg/m <sup>3</sup> 8 hr	
		TWA: 0.025 mg/m <sup>3</sup> 8 hr	
		Carc. as Cr	
		Resp. Sens.	

### **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**

Use only under a chemical fume hood. 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

### 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
١	Butyl rubber	See manufacturers	-	AS/NZS 2161	(minimum requirement)
-		recommendations			

Inspect gloves before use.

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

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

Remove gloves with care avoiding skin contamination.

Skin and body protection Long sleeved clothing

Repiratory 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 Acid gases filter Type E Yellow conforming to

EN14387 (or AUS/NZ equivalent)

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

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

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

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

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

# Section 9 - Physical and Chemical Properties

## Information on basic physical and chemical properties

Appearance Red brown Liquid

Odor Odorless

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Acidic

Liquid

(Air = 1.0)

Liquid

Method - No information available

Odor Threshold No data available

**pH** 2.0

Melting Point/Range> 0 °C / 32 °FSoftening PointNo data availableBoiling Point/Range> 100 °C / 212 °F

Flash Point Not applicable

Evaporation Rate 1 (Ether = 1.0)
Flammability (solid,gas) Not applicable

Explosion Limits No data available

Vapor Pressure No information available

Vapor Density No information available

Specific Gravity / Density 1.5

Bulk Density Not applicable

Water Solubility Soluble

Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

Autoignition Temperature
Decomposition Temperature
Viscosity
No data available
No data available
No data available
No information available

Oxidizing Properties Oxidizer

Other information

Molecular FormulaCrO3Molecular Weight99.99

# Section 10 - Stability and Reactivity

**Reactivity** Yes

Stability Oxidizer: Contact with combustible/organic material may cause fire.

Conditions to Avoid Incompatible products, Excess heat, Combustible material.

Incompatible Materials Reducing Agent, Strong bases, Alcohols, Metals, Strong reducing agents, Combustible

material.

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

**Hazardous Polymerization** No information available.

# Section 11 - Toxicological Information

## **Information on Toxicological Effects**

### **Product Information**

(a) acute toxicity;

OralCategory 3DermalCategory 1InhalationCategory 2

## Toxicology data for the components

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Water	-	-	-
Chromium trioxide (CrO3)	LD50 = 80 mg/kg (Rat)	LD50 = 57 mg/kg ( Rabbit )	LC50 = 217 mg/m <sup>3</sup> (Rat) 4 h

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(b) skin corrosion/irritation; Category 1 A

Category 1 (c) serious eye damage/irritation;

(d) respiratory or skin sensitization;

Respiratory Category 1 Skin Category 1

Sensitization No information available

(e) germ cell mutagenicity; Category 1B

Mutagenic effects have occurred in humans

(f) carcinogenicity; Category 1A

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
Chromium trioxide (CrO3)					Group 1	Carc Cat. 1A		

(g) reproductive toxicity;

Category 2 **Reproductive Effects** 

**Developmental Effects Teratogenicity** 

Experiments have shown reproductive toxicity effects on laboratory animals

Developmental effects have occurred in experimental animals Teratogenic effects have occurred in experimental animals.

(h) STOT-single exposure; Category 3

Results / Target organs Respiratory system

(i) STOT-repeated exposure; Category 1

Respiratory system, Eyes, Skin, Gastrointestinal tract (GI), Central nervous system (CNS), **Target Organs** 

Blood, Liver.

No data available (j) aspiration hazard;

Other Adverse Effects Tumorigenic effects have been reported in experimental animals.

Symptoms / effects,both acute and Product is a corrosive material. Use of gastric lavage or emesis is contraindicated.

delayed

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** 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
Chromium trioxide (CrO3)	LC50: = 40 mg/L, 96h			
	static (Colisa fasciatus)			

**Persistence and Degradability** 

**Persistence** 

Soluble in 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.

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Bioaccumulative Potential Bioaccumulation is unlikely

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

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

# **Section 14 - Transport Information**

### IMDG/IMO

**UN-No** UN1755

Proper Shipping Name CHROMIC ACID SOLUTION

Hazard Class 8
Packing Group ||

<u>ADG</u>

**UN-No** UN1755

Proper Shipping Name CHROMIC ACID SOLUTION

Hazard Class 8
Packing Group

Component	Hazchem Code
Chromium trioxide (CrO3)	1W
1333-82-0 ( 50 )	

### IATA

UN-No UN1755

Proper Shipping Name CHROMIC ACID SOLUTION

Hazard Class 8
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

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

## National Regulations

**Australia** 

See section 8 for national exposure control parameters.

Component	Health Surveillance
Chromium trioxide (CrO3)	Listed
1333-82-0 ( 50 )	Demographic, medical and occupational history
	Physical examination with emphasis on the respiratory system
	and skin
	Weekly skin inspection of hands and forearms by a competent
	person

## 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	
Chromium trioxide (CrO3) - 1333-82-0	Schedule 6 listed - except its salts and derivatives Schedule 6 listed - except in paints or tinters containing <=5% of Chromium as the Ammonium, Barium, Calcium, Iron, Potassium, Sodium, Strontium or Zinc chromate calculated on the non-volatile content of the paint or tinter	

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

Component	Australian Industrial Chemicals Introduction Scheme (AICIS)	Additional information
Water - 7732-18-5	Present	-
Chromium trioxide (CrO3) - 1333-82-0	Present	-

## Australian - Illicit Drug Precursors/Reagents Substance List

Verify requirements related to using, handling and storing these substances. This product contains one or more 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

Component	Australian - Illicit Drug Precursors/Reagents Substance List	Chemicals of Security Concern
Chromium trioxide (CrO3) - 1333-82-0	Category 2	

#### Legend

Category 2 - Chemicals and apparatus that require an End User Declaration when sold to non-account customers

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.

## **International Inventories**

Component	AICS	NZIoC	EINECS	ELINCS	TSCA	DSL	NDSL	PICCS	<b>ENCS</b>	ISHL	IECSC	KECL
Water	X	X	231-791-2	-	X	Χ	-	Χ	Χ		Х	KE-35400
Chromium trioxide (CrO3)	Х	Х	215-607-8	-	Х	Х	-	Х	Х	Х	Х	KE-06020

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Legend: X - Listed. '-' - Not Listed. R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA. 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 dispoal

Take note that wastes may be subject to export, import, or transit controls pursuant to the Basel convention and/or local regulations implementing the Basel convention.

Component	Basel Convention (Hazardous Waste)	Australian Hazardous Waste Act - Categories of Wastes to Be Controlled		
Chromium trioxide (CrO3) - 1333-82-0	Annex I - Y21	Y21		

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
Water	7732-18-5	Listed	Not applicable	Not applicable	Not applicable
Chromium trioxide (CrO3)	1333-82-0	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)
Chromium trioxide (CrO3)	Carcinogenic Category 1B, Mutagenic Category 1B Article 57 Application date: March 21, 2016 Sunset date: September 21, 2017 Exemption - None	Use restricted. See item 72. (see link for restriction details) Use restricted. See item 28. (see link for restriction details) Use restricted. See item 29. (see link for restriction details) Use restricted. See item 75. (see link for restriction details) Use restricted. See item 47. (see link for restriction details)	SVHC Candidate list - 215-607-8 - Carcinogenic, Article 57a;Mutagenic, Article 57b

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) NZIoC - New Zealand Inventory of Chemicals

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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

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

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)

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

ACGIH - American Conference of Governmental Industrial Hygienists

IMO/IMDG - International Maritime Organization/International Maritime

**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

LC50 - Lethal Concentration 50% ATE - Acute Toxicity Estimate

Dangerous Goods Code

**CAS** - Chemical Abstracts Service

RPE - Respiratory Protective Equipment NOEC - No Observed Effect Concentration **BCF** - Bioconcentration factor

Predicted No Effect Concentration (PNEC)

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

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 hvaiene.

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.

21-Nov-2022 **Revision Date Revision Summary** Not applicable.

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**

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