

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

## Section 1 - Identification

**Product Name** Xylenes  
**CAS No** 1330-20-7

**Product Code** 16371  
**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

Flammable liquids Category 3

#### Health hazards

Aspiration Toxicity	Category 1
Acute Dermal Toxicity	Category 4
Acute Inhalation Toxicity - Vapors	Category 4
Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Specific target organ toxicity - (single exposure)	Category 3
Specific target organ toxicity - (repeated exposure)	Category 2

#### Environmental hazards

Chronic aquatic toxicity Category 3

#### Label Elements



Flame



Exclamation Mark



Health Hazard

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

H226 - Flammable liquid and vapor

H304 - May be fatal if swallowed and enters airways

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

H373 - May cause damage to organs through prolonged or repeated exposure

H412 - Harmful to aquatic life with long lasting effects

H312 + H332 - Harmful in contact with skin or if inhaled

**Precautionary Statements**

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

P233 - Keep container tightly closed

P240 - Ground and bond container and receiving equipment

P242 - Use non-sparking tools

P243 - Take action to prevent static discharges

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

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

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

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor

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

P312 - Call a POISON CENTER or doctor if you feel unwell

P331 - Do NOT induce vomiting

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

P362 + P364 - Take off contaminated clothing and wash it 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**

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 %
Xylenes (o-, m-, p- isomers)	1330-20-7	>95

## Section 4 - First Aid Measures

**Inhalation**

Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur. Risk of serious damage to the lungs (by aspiration).

<b>Ingestion</b>	Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting. Call a physician or poison control center immediately. If vomiting occurs naturally, have victim lean forward.
<b>Skin Contact</b>	Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.
<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
<b>General Advice</b>	If symptoms persist, call 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>	Difficulty in breathing. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting
<b>Notes to Physician</b>	Treat symptomatically. Symptoms may be delayed.

## Section 5 - Fire Fighting Measures

### Suitable Extinguishing Media

Water spray. Alcohol resistant foam. Dry chemical. Carbon dioxide (CO<sub>2</sub>). Water mist may be used to cool closed containers.

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

Do not use a solid water stream as it may scatter and spread fire.

### Specific Hazards Arising from the Chemical

Flammable. Containers may explode when heated. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back.

### 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. Use personal protective equipment as required. Remove all sources of ignition. Take precautionary measures against static discharges.

### Environmental Precautions

Do not flush into surface water or sanitary sewer system.

### Methods for Containment and Clean Up

#### Clean-up methods - small spillage

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Remove all sources of ignition. Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment.

#### 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**

Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. Use spark-proof tools and explosion-proof equipment. Take precautionary measures against static discharges.

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

Keep away from heat, sparks and flame. Flammables area. Keep container tightly closed in a dry 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

**NZ** - Workplace Exposure Standards and Biological Exposure Indices (6th edition). New Zealand Department of Labor

Component	Australia	New Zealand WEL	ACGIH TLV	The United Kingdom	Germany
Xylenes (o-, m-, p-isomers)	STEL: 150 ppm STEL: 655 mg/m <sup>3</sup> TWA: 80 ppm TWA: 350 mg/m <sup>3</sup>	TWA: 50 ppm TWA: 217 mg/m <sup>3</sup>	TWA: 20 ppm	STEL: 100 ppm 15 min STEL: 441 mg/m <sup>3</sup> 15 min TWA: 50 ppm 8 hr TWA: 220 mg/m <sup>3</sup> 8 hr Skin	TWA: 50 ppm (8 Stunden). AGW - exposure factor 2 TWA: 220 mg/m <sup>3</sup> (8 Stunden). AGW - exposure factor 2 TWA: 50 ppm (8 Stunden). MAK all isomers TWA: 220 mg/m <sup>3</sup> (8 Stunden). MAK all isomers Höhepunkt: 100 ppm Höhepunkt: 440 mg/m <sup>3</sup> Haut Haut all isomers

**Biological limit values**

**UK** - Biological Monitoring Guidance Values provided by the UK's Health and Safety Executive (HSE) Control of Substances Hazardous to Health Regulations (COSHH) 2002 (as amended) and EH40/2005.

**NZ** - Substances assigned Biological Exposure Indices in the New Zealand Workplace Exposure Standards and Biological Exposure Indices (6th edition). New Zealand Department of Labor

Component	Australia	New Zealand	European Union	United Kingdom	Germany
Xylenes (o-, m-, p-isomers)		1.5 g/L (urine) end of shift (Methylhippuric acid)		Methyl hippuric acid: 650 mmol/mol creatinine urine post shift	Methylhippuric(tolur-)acid (all isomers): 2000 mg/L urine (end of shift all isomers)

### Exposure Controls Engineering Measures

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

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
Viton (R)	> 480 minutes	0.7 mm	AS/NZS 2161	As tested under EN374-3 Determination of Resistance to Permeation by Chemicals
PVA	> 360 minutes	0.38 mm		
Nitrile rubber	> 96 minutes	0.38 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 compatibility, 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

##### 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:

Organic gases and vapours filter Type A Brown 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	Colourless	
Physical State	Liquid	
Odor	aromatic	
Odor Threshold	No data available	
pH	No information available	
Melting Point/Range	-34 °C / -29.2 °F	
Softening Point	No data available	
Boiling Point/Range	136 - 140 °C / 276.8 - 284 °F	@ 760 mmHg
Flash Point	23 °C / 73.4 °F	Method - No information available
Evaporation Rate	No data available	
Flammability (solid,gas)	Not applicable	Liquid
Explosion Limits	Lower 1% (V) Upper 7% (V)	
Vapor Pressure	8 mbar @ 20°C	
Vapor Density	No data available	(Air = 1.0)
Specific Gravity / Density	0.865	

<b>Bulk Density</b>	Not applicable	Liquid
<b>Water Solubility</b>	Insoluble	
<b>Solubility in other solvents</b>	No information available	
<b>Partition Coefficient (n-octanol/water)</b>		
<b>Component</b>	<b>log Pow</b>	
Xylenes (o-, m-, p- isomers)	3.15	
<b>Autoignition Temperature</b>	463 °C	
<b>Decomposition Temperature</b>	No data available	
<b>Viscosity</b>	No data available	
<b>Explosive Properties</b>		explosive air/vapour mixtures possible
<b>Oxidizing Properties</b>	No information available	
<b>Other information</b>		
<b>Molecular Formula</b>	C8 H10	
<b>Molecular Weight</b>	106.17	

## 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>	Keep away from open flames, hot surfaces and sources of ignition.
<b>Incompatible Materials</b>	None known.
<b>Hazardous Decomposition Products</b>	None under normal use conditions.
<b>Hazardous Polymerization</b>	No information available.

## Section 11 - Toxicological Information

### Information on Toxicological Effects

#### Product Information

<b>(a) acute toxicity;</b>	
<b>Oral</b>	Based on available data, the classification criteria are not met
<b>Dermal</b>	Category 4
<b>Inhalation</b>	Category 4

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Xylenes (o-, m-, p- isomers)	LD50 = 3500 mg/kg ( Rat )	LD50 > 4350 mg/kg ( Rabbit )	29.08 mg/L [MOE Risk Assessment Vol.1, 2002]

<b>(b) skin corrosion/irritation;</b>	Category 2
---------------------------------------	------------

<b>(c) serious eye damage/irritation;</b>	Category 2
---	------------

<b>(d) respiratory or skin sensitization;</b>	
<b>Respiratory</b>	Based on available data, the classification criteria are not met
<b>Skin</b>	Based on available data, the classification criteria are not met

<b>(e) germ cell mutagenicity;</b>	Based on available data, the classification criteria are not met
------------------------------------	--

<b>(f) carcinogenicity;</b>	Based on available data, the classification criteria are not met
-----------------------------	--

	There are no known carcinogenic chemicals in this product
(g) reproductive toxicity;	Based on available data, the classification criteria are not met
(h) STOT-single exposure;	Category 3
Results / Target organs	Respiratory system
(i) STOT-repeated exposure;	Category 2
Target Organs	No information available.
(j) aspiration hazard;	Category 1
Symptoms / effects, both acute and delayed	Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting

## Section 12 - Ecological Information

**Ecotoxicity effects** The product contains following substances which are hazardous for the environment. Contains a substance which is: Harmful to aquatic organisms.

Component	Freshwater Fish	Water Flea	Freshwater Algae	Microtox
Xylenes (o-, m-, p- isomers)	LC50: 30.26 - 40.75 mg/L, 96h static (Poecilia reticulata) LC50: = 780 mg/L, 96h semi-static (Cyprinus carpio) LC50: 23.53 - 29.97 mg/L, 96h static (Pimephales promelas) LC50: > 780 mg/L, 96h (Cyprinus carpio) LC50: 7.711 - 9.591 mg/L, 96h static (Lepomis macrochirus) LC50: = 19 mg/L, 96h (Lepomis macrochirus) LC50: 13.1 - 16.5 mg/L, 96h flow-through (Lepomis macrochirus) LC50: 13.5 - 17.3 mg/L, 96h (Oncorhynchus mykiss) LC50: 2.661 - 4.093 mg/L, 96h static (Oncorhynchus mykiss) LC50: = 13.4 mg/L, 96h flow-through (Pimephales promelas)	LC50: = 0.6 mg/L, 48h (Gammarus lacustris) EC50: = 3.82 mg/L, 48h (water flea)		EC50 = 0.0084 mg/L 24 h

### Persistence and Degradability

<b>Persistence</b>	Persistence is unlikely.
<b>Degradation in sewage treatment plant</b>	Contains substances known to be hazardous to the environment or not degradable in waste water treatment plants.
<b>Bioaccumulative Potential</b>	Bioaccumulation is unlikely

Component	log Pow	Bioconcentration factor (BCF)
Xylenes (o-, m-, p- isomers)	3.15	0.6 - 15 dimensionless

<b>Mobility</b>	Spillage unlikely to penetrate soil. The product is insoluble and floats on water. Is not likely mobile in the environment due its low water solubility
<b>Endocrine Disruptor Information</b>	This product does not contain any known or suspected endocrine disruptors
<b>Persistent Organic Pollutant</b>	This product does not contain any known or suspected substance
<b>Ozone Depletion Potential</b>	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. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep product and empty container away from heat and sources of ignition.

**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. Can be landfilled or incinerated, when in compliance with local regulations. Do not let this chemical enter the environment. Do not empty into drains.

## Section 14 - Transport Information

**IMDG/IMO**

UN-No	UN1307
Proper Shipping Name	XYLENES
Hazard Class	3
Packing Group	III

**ADG**

UN-No	UN1307
Proper Shipping Name	XYLENES
Hazard Class	3
Packing Group	III

Component	Hazchem Code
Xylenes (o-, m-, p- isomers) 1330-20-7 ( >95 )	3Y 3YE

**IATA**

UN-No	UN1307
Proper Shipping Name	XYLENES
Hazard Class	3
Packing Group	III

**Environmental hazards** No hazards identified

**Special Precautions** No special precautions required

**Additional information** 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.

Component	Standard for the Uniform Scheduling of Medicines and Poisons
Xylenes (o-, m-, p- isomers) - 1330-20-7	Schedule 5 listed - including Kerosene, Diesel [distillate], Mineral turpentine, White petroleum spirit, Toluene, Xylene and light mineral and paraffin oils but except their derivative; except a) Toluene and Xylene when included in Schedule 6, b) Benzene and liquid aromatic hydrocarbons when included in Schedule 7, c) food grade and pharmaceutical grade White mineral oil, d) in solid or semi-solid preparations, e) in preparations containing ≤25% of designated solvents, f) in preparations packed in pressurized spray packs, g) in adhesives packed in containers each containing ≤50 grams of adhesive, h) in writing correction fluids and thinners for writing correction fluids packed in containers having a capacity of ≤20 mL, or i) in other preparations when packed in containers with a capacity of ≤2 mL Schedule 6 listed - except its derivatives; except in preparations containing ≤50% of Xylene or Xylene and Toluene

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

Component	Australian Industrial Chemicals Introduction Scheme (AICIS)	Additional information
Xylenes (o-, m-, p- isomers) - 1330-20-7	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** Subject to reporting requirements

Component	National pollutant inventory
Xylenes (o-, m-, p- isomers) - 1330-20-7	10 tonne/yr. Threshold category 1 including individual or mixed isomers

**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	ENCS	ISHL	IECSC	KECL
Xylenes (o-, m-, p- isomers)	X	X	215-535-7	-	X	X	-	X	X	X	X	KE-35427

**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

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

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
Xylenes (o-, m-, p- isomers) - 1330-20-7	Annex I - Y42	Y42 except Halogenated solvents

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
Xylenes (o-, m-, p- isomers)	1330-20-7	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)
Xylenes (o-, m-, p- isomers)	-	Use restricted. See item 75. (see link for restriction details)	-

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

## Section 16 - Other Information

**Legend**

**AICS** - Australian Inventory of Chemical Substances  
**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDL** - 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 5433:2020** - 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

**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 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.

Fire prevention and fighting, identifying hazards and risks, static electricity, explosive atmospheres posed by vapours and dusts.

**Revision Date** 03-Oct-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