

# METHYLENE CHLORIDE

VWR International, Pty Ltd

Chemwatch: 1593

Version No: 4.1.1.1

Safety Data Sheet according to WHS and ADG requirements

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S.GHS.AUS.EN

## SECTION 1 Identification of the substance / mixture and of the company / undertaking

### Product Identifier

<b>Product name:</b>	METHYLENE CHLORIDE
<b>Chemical Name:</b>	methylene chloride
<b>Synonyms:</b>	24/R1325, Aerothene MM, C-H2-Cl2, DCM, Freon 30, NCI-C50102, Narkotil, Product Code 270563, RCRA Waste Number U080 R 30, Restek Grob Test Mix, Solaesthin, Solmethine, dichloromethane, dichloromethane, 99.9%, ACS, HPLC grade, dichloromethane, methylene chloride, methane dichloride, methylene bichloride, methylene dichloride
<b>Proper shipping name:</b>	DICHLOROMETHANE (see 3.2.5 for relevant [AUST.] entries)
<b>Chemical formula:</b>	CH <sub>2</sub> Cl <sub>2</sub>
<b>Other means of identification:</b>	
<b>CAS number:</b>	75-09-2

### Relevant identified uses of the substance or mixture and uses advised against

<b>Relevant identified uses:</b>	The use of a quantity of material in an unventilated or confined space may result in increased exposure and an irritating atmosphere developing. Before starting consider control of exposure by mechanical ventilation.
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### Details of the supplier of the safety data sheet

<b>Registered company name:</b>	VWR International, Pty Ltd
<b>Address:</b>	Unit 1/31 Archimedes Place 4172 QLD Australia
<b>Telephone:</b>	61 7 3009 4100 ; 1300 727 696
<b>Fax:</b>	61 7 3009 4199 ; 1300 135 123
<b>Website:</b>	<a href="http://au.vwr.com">http://au.vwr.com</a>
<b>Email:</b>	csaus@au.vwr.com

### Emergency telephone number

<b>Association / Organisation:</b>	
<b>Emergency telephone numbers:</b>	61 7 3009 4100 ; 1300 727 696
<b>Other emergency telephone numbers:</b>	61 7 3009 4100 ; 1300 727 696

## SECTION 2 Hazards identification

### Classification of the substance or mixture

**HAZARDOUS CHEMICAL. DANGEROUS GOODS. According to the Model WHS Regulations and the ADG Code.**

#### ChemWatch Hazard Ratings

	0	1	2	3	4
Flammability	0				
Toxicity		2			
Body Contact			2		
Reactivity				1	
Chronic					3

0 = Minimum  
1 = Low  
2 = Moderate  
3 = High  
4 = Extreme

<b>Poisons Schedule:</b>	S5, NZS3
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#### GHS Classification<sup>[2]</sup>:

Carcinogen Category 2

**Legend:** 1. Classified by Chemwatch; 2. Classification drawn from HSIS; 3. Classification drawn from EC Directive 1272/2008 - Annex VI

### Label elements

#### GHS label elements



<b>Signal word:</b>	<b>WARNING</b>
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#### Hazard statement(s):

H351	Suspected of causing cancer
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#### Precautionary statement(s): Prevention

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

#### Precautionary statement(s): Response

P308+P313	IF exposed or concerned: Get medical advice/attention.
<b>Precautionary statement(s): Storage</b>	
P405	Store locked up.
<b>Precautionary statement(s): Disposal</b>	
P501	Dispose of contents/container to authorised chemical landfill or if organic to high temperature incineration

## SECTION 3 Composition / information on ingredients

### Substances

CAS No	%[weight]	Name
75-09-2	>=99	<a href="#">methylene chloride</a>

### Mixtures

See section above for composition of Substances

## SECTION 4 First aid measures

### Description of first aid measures

#### Eye Contact:

If this product comes in contact with the eyes:

- Wash out immediately with fresh running water.
- Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
- Seek medical attention without delay; if pain persists or recurs seek medical attention.
- Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

#### Skin Contact:

If skin contact occurs:

- Immediately remove all contaminated clothing, including footwear.
- Flush skin and hair with running water (and soap if available).
- Seek medical attention in event of irritation.

#### Inhalation:

- If fumes or combustion products are inhaled remove from contaminated area.
- Lay patient down. Keep warm and rested.
- Prosthesis such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.
- Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.
- Transport to hospital, or doctor.

#### Ingestion:

- **IF SWALLOWED, REFER FOR MEDICAL ATTENTION, WHERE POSSIBLE, WITHOUT DELAY.**
- For advice, contact a Poisons Information Centre or a doctor.
- Urgent hospital treatment is likely to be needed.
- In the mean time, qualified first-aid personnel should treat the patient following observation and employing supportive measures as indicated by the patient's condition.
- If the services of a medical officer or medical doctor are readily available, the patient should be placed in his/her care and a copy of the MSDS should be provided. Further action will be the responsibility of the medical specialist.
- If medical attention is not available on the worksite or surroundings send the patient to a hospital together with a copy of the MSDS.

**Where medical attention is not immediately available or where the patient is more than 15 minutes from a hospital or unless instructed otherwise:**

- **INDUCE** vomiting with fingers down the back of the throat, **ONLY IF CONSCIOUS**. Lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.

**NOTE:** Wear a protective glove when inducing vomiting by mechanical means.

- Avoid giving milk or oils.
- Avoid giving alcohol.

## Indication of any immediate medical attention and special treatment needed

for poisons (where specific treatment regime is absent):

### BASIC TREATMENT

- Establish a patent airway with suction where necessary.
- Watch for signs of respiratory insufficiency and assist ventilation as necessary.
- Administer oxygen by non-rebreather mask at 10 to 15 L/min.
- Monitor and treat, where necessary, for pulmonary oedema.
- Monitor and treat, where necessary, for shock.
- Anticipate seizures .
- **DO NOT use emetics.** Where ingestion is suspected rinse mouth and give up to 200 ml water (5 ml/kg recommended) for dilution where patient is able to swallow, has a strong gag reflex and does not drool.

### ADVANCED TREATMENT

- Consider orotracheal or nasotracheal intubation for airway control in unconscious patient or where respiratory arrest has occurred.
- Positive-pressure ventilation using a bag-valve mask might be of use.
- Monitor and treat, where necessary, for arrhythmias.
- Start an IV D5W TKO. If signs of hypovolaemia are present use lactated Ringers solution. Fluid overload might create complications.
- Drug therapy should be considered for pulmonary oedema.
- Hypotension with signs of hypovolaemia requires the cautious administration of fluids. Fluid overload might create complications.
- Treat seizures with diazepam.
- Proparacaine hydrochloride should be used to assist eye irrigation.

BRONSTEIN, A.C. and CURRANCE, P.L.

EMERGENCY CARE FOR HAZARDOUS MATERIALS EXPOSURE: 2nd Ed. 1994

Treat symptomatically.

for intoxication due to Freons/ Halons;

A: Emergency and Supportive Measures

- Maintain an open airway and assist ventilation if necessary
- Treat coma and arrhythmias if they occur. Avoid (adrenaline) epinephrine or other sympathomimetic amines that may precipitate ventricular arrhythmias. Tachyarrhythmias caused by increased myocardial sensitisation may be treated with propranolol, 1-2 mg IV or esmolol 25-100 microgm/kg/min IV.
- Monitor the ECG for 4-6 hours

B: Specific drugs and antidotes:

- There is no specific antidote

C: Decontamination

- Inhalation; remove victim from exposure, and give supplemental oxygen if available.
- Ingestion; (a) Prehospital: Administer activated charcoal, if available. **DO NOT** induce vomiting because of rapid absorption and the risk of abrupt onset CNS depression. (b) Hospital:

Administer activated charcoal, although the efficacy of charcoal is unknown. Perform gastric lavage only if the ingestion was very large and recent (less than 30 minutes)

D: Enhanced elimination:

- There is no documented efficacy for diuresis, haemodialysis, haemoperfusion, or repeat-dose charcoal.

*POISONING and DRUG OVERDOSE, Californian Poison Control System Ed. Kent R Olson; 3rd Edition*

- Do not administer sympathomimetic drugs unless absolutely necessary as material may increase myocardial irritability.
- No specific antidote.
- Because rapid absorption may occur through lungs if aspirated and cause systematic effects, the decision of whether to induce vomiting or not should be made by an attending physician.
- If lavage is performed, suggest endotracheal and/or esophageal control.
- Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach.
- Treatment based on judgment of the physician in response to reactions of the patient

## SECTION 5 Firefighting measures

### Extinguishing media

- Water spray or fog.
- Foam.
- Dry chemical powder.
- BCF (where regulations permit).

### Special hazards arising from the substrate or mixture

#### Fire Incompatibility:

- Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result

### Advice for firefighters

#### Fire Fighting:

- Alert Fire Brigade and tell them location and nature of hazard.
- Wear breathing apparatus plus protective gloves.
- Prevent, by any means available, spillage from entering drains or water courses.
- Use fire fighting procedures suitable for surrounding area.

#### Fire/Explosion Hazard:

Decomposes on heating and produces acrid and toxic fumes of:, carbon dioxide (CO<sub>2</sub>),

## SECTION 6 Accidental release measures

### Personal precautions, protective equipment and emergency procedures

#### Minor Spills:

- Clean up all spills immediately.
- Avoid breathing vapours and contact with skin and eyes.
- Control personal contact with the substance, by using protective equipment.
- Contain and absorb spill with sand, earth, inert material or vermiculite.

#### Major Spills:

- Clear area of personnel and move upwind.
- Alert Fire Brigade and tell them location and nature of hazard.
- Wear breathing apparatus plus protective gloves.
- Prevent, by any means available, spillage from entering drains or water courses.

Personal Protective Equipment advice is contained in Section 8 of the MSDS.

## SECTION 7 Handling and storage

### Precautions for safe handling

#### Safe handling

##### Contains low boiling substance:

Storage in sealed containers may result in pressure buildup causing violent rupture of containers not rated appropriately.

- Check for bulging containers.
- Vent periodically

#### Other information

- Store in original containers.
- Keep containers securely sealed.
- Store in a cool, dry, well-ventilated area.
- Store away from incompatible materials and foodstuff containers.

### Conditions for safe storage, including any incompatibilities

#### Suitable container:

- **DO NOT use aluminium or galvanised containers**
- Lined metal can, lined metal pail/ can.
- Plastic pail.

#### Storage incompatibility:

Methylene chloride

- is a combustible liquid under certain circumstances even though there is no measurable flash point and it is difficult to ignite
- its is flammable in ambient air in the range 12-23%; increased oxygen content can greatly enhance fire and explosion potential
- contact with hot surfaces and elevated temperatures can form fumes of hydrogen chloride and phosgene

#### Package Material Incompatibilities:

## SECTION 8 Exposure controls / personal protection

### Control parameters

#### Occupational Exposure Limits (OEL)

#### INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
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**Emergency Limits**

Ingredient	TEEL-0	TEEL-1	TEEL-2	TEEL-3
methylene chloride	25(ppm)	200(ppm)	560(ppm)	6900(ppm)

  

Ingredient	Original IDLH	Revised IDLH
methylene chloride	10,000 / 5,000(ppm)	2,000 / 2,300(ppm)

**Exposure controls****Appropriate engineering controls**

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.

The basic types of engineering controls are:

Process controls which involve changing the way a job activity or process is done to reduce the risk.

**Personal protection****Eye and face protection:**

- Safety glasses with side shields.
- Chemical goggles.
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lens or restrictions on use, should be created for each workplace or task.

**Skin protection:**

See Hand protection below

**Hand protection:**

- Wear chemical protective gloves, e.g. PVC.
- Wear safety footwear or safety gumboots, e.g. Rubber

The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

**Body protection:**

See Other protection below

**Other protection:**

- Overalls.
- Eyewash unit.
- Barrier cream.
- Skin cleansing cream.

**Thermal hazards:****Recommended material(s):****GLOVE SELECTION INDEX**

Glove selection is based on a modified presentation of the:

**"Forsberg Clothing Performance Index".**

The effect(s) of the following substance(s) are taken into account in the METHYLENE CHLORIDE

Material	CPI
PE/EVAL/PE	A
PVA	A
TEFLON	B

\* CPI - Chemwatch Performance Index

A: Best Selection

B: Satisfactory; may degrade after 4 hours continuous immersion

C: Poor to Dangerous Choice for other than short term immersion

**Respiratory protection:**

Type AX Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required.

Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter.

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 10 x ES	AX-AUS / Class 1	-	AX-PAPR-AUS / Class 1
up to 50 x ES	Air-line*	-	-
up to 100 x ES	-	AX-3	-
100+ x ES	-	Air-line**	-

\* - Continuous-flow; \*\* - Continuous-flow or positive pressure demand

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

**SECTION 9 Physical and chemical properties****Information on basic physical and chemical properties****Appearance**

Physical state	Liquid	Relative density (Water = 1)	1.32
Odour		Partition coefficient n-octanol / water	
Odour threshold		Auto-ignition temperature (°C)	<ul style="list-style-type: none"> <li>• Remove all ignition sources.</li> <li>• Clean up all spills immediately.</li> <li>• Avoid breathing vapours and contact with skin and eyes.</li> <li>• Control personal contact with the substance, by using protective equipment.</li> </ul>
pH (as supplied)	Not applicable	Decomposition temperature	
Melting point / freezing point (°C)	-97	Viscosity (cSt)	
Initial boiling point and boiling range (°C)	40	Molecular weight (g/mol)	84.93
Flash point (°C)		Taste	
Evaporation rate	>1 BuAc=1	Explosive properties	
Flammability		Oxidising properties	
Upper Explosive Limit (%)	22-oxygen nrich	Surface Tension (dyn/cm or mN/m)	
Lower Explosive Limit (%)	14-oxygen nrich		
Vapour pressure (kPa)	46.5 @20C		
Solubility in water (g/L)	2.0%		
Vapour density (Air = 1)	2.93		

<b>Volatile Component (%vol)</b>	100
<b>Gas group</b>	IIA
<b>pH as a solution(1%)</b>	Not applicable.

## SECTION 10 Stability and reactivity

<b>Reactivity:</b>
See section 7
<b>Chemical stability:</b>
<ul style="list-style-type: none"> <li>• Presence of incompatible materials.</li> <li>• Product is considered stable.</li> <li>• Hazardous polymerisation will not occur.</li> </ul>
<b>Possibility of hazardous reactions:</b>
See section 7
<b>Conditions to avoid:</b>
See section 7
<b>Incompatible materials:</b>
See section 7
<b>Hazardous decomposition products:</b>
See section 5

## SECTION 11 Toxicological information

<b>Information on toxicological effects</b>
<b>Inhaled:</b>
Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by narcosis, reduced alertness, loss of reflexes, lack of coordination and vertigo. Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may be damaging to the health of the individual. Limited evidence or practical experience suggests that the material may produce irritation of the respiratory system, in a significant number of individuals, following inhalation.
<b>Ingestion:</b>
Accidental ingestion of the material may be harmful; animal experiments indicate that ingestion of less than 150 gram may be fatal or may produce serious damage to the health of the individual.
<b>Skin Contact:</b>
The material produces severe skin irritation; evidence exists, or practical experience predicts, that the material either: <ul style="list-style-type: none"> <li>• produces severe inflammation of the skin in a substantial number of individuals following direct contact, and/or</li> <li>• produces significant and severe inflammation when applied to the healthy intact skin of animals (for up to four hours), such inflammation being present twenty-four hours or more after the end of the exposure period.</li> <li>• Skin irritation may also be present after prolonged or repeated exposure; this may result in a form of contact dermatitis (nonallergic).</li> </ul>
<b>Eye:</b>
Limited evidence or practical experience suggests, that the material may cause moderate eye irritation in a substantial number of individuals and/or may produce significant ocular lesions which are present twenty-four hours or more after instillation into the eye(s) of experimental animals. Repeated or prolonged exposure may cause moderate inflammation (similar to windburn) characterised by a temporary redness of the conjunctiva (conjunctivitis); temporary impairment of vision and/or other transient eye damage/ulceration may occur.
<b>Chronic:</b>
On the basis, primarily, of animal experiments, concern has been expressed that the material may produce carcinogenic or mutagenic effects; in respect of the available information, however, there presently exists inadequate data for making a satisfactory assessment. Limited evidence suggests that repeated or long-term occupational exposure may produce cumulative health effects involving organs or biochemical systems. There is some evidence to provide a presumption that human exposure to the material may result in impaired fertility on the basis of: some evidence in animal studies of impaired fertility in the absence of toxic effects, or evidence of impaired fertility occurring at around the same dose levels as other toxic effects but which is not a secondary non-specific consequence of other toxic effects. Methylene chloride exposures cause liver and kidney damage in animals and this justifies consideration before exposing persons with a history of impaired liver function and/or renal disorders.

TOXICITY	IRRITATION
<b><i>methylene chloride</i></b>	
Inhalation (rat) LC50: 88000 mg/m <sup>3</sup> /30 m	Eye(rabbit): 162 mg - moderate
Oral (rat) LD50: 1600 mg/kg	Eye(rabbit): 500 mg/24hr - mild
	Skin (rabbit): 100mg/24hr-moderate
	Skin (rabbit): 810 mg/24hr-SEVERE

\* Value obtained from manufacturer's msds unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances

<b>METHYLENE CHLORIDE</b>			
The material may produce moderate eye irritation leading to inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. The material may produce severe skin irritation after prolonged or repeated exposure, and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterised by skin redness (erythema) thickening of the epidermis.			
<b>Acute Toxicity:</b>	Not Applicable	<b>Carcinogenicity:</b>	Carcinogen Category 2
<b>Skin Irritation/Corrosion:</b>	Not Applicable	<b>Reproductivity:</b>	Not Applicable
<b>Serious Eye Damage/Irritation:</b>	Not Applicable	<b>STOT - Single Exposure:</b>	Not Applicable
<b>Respiratory or Skin sensitisation:</b>	Not Applicable	<b>STOT - Repeated Exposure:</b>	Not Applicable
<b>Mutagenicity:</b>	Not Applicable	<b>Aspiration Hazard:</b>	Not Applicable

<b>CMR STATUS</b>			
CARCINOGEN			
methylene chloride	Australia Exposure Standards - Carcinogens		Carc. 2
SKIN			
methylene chloride	Australia Exposure Standards - Skin		Sk

## SECTION 12 Ecological information

<b>Toxicity</b>
For methylene chloride: log Kow: 1.25 log Koc: 1.68 log Kom: 1.44

Persistence and degradability		
Ingredient	Persistence: Water/Soil	Persistence: Air
Bioaccumulative potential		
Ingredient	Bioaccumulation	
Mobility in soil		
Ingredient	Mobility	

## SECTION 13 Disposal considerations

### Waste treatment methods

#### Product / Packaging disposal:

- Containers may still present a chemical hazard/ danger when empty.
- Return to supplier for reuse/ recycling if possible.

#### Otherwise:

- If container can not be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill.

## SECTION 14 Transport information

### Labels Required:



#### Marine Pollutant: NO

HAZCHEM: 2Z

#### Land transport (ADG)

UN number	1593	Packing group	III
UN proper shipping name	DICHLOROMETHANE (see 3.2.5 for relevant [AUST.] entries)	Environmental hazard	No relevant data
Transport hazard class(es)	Class: 6.1 Subrisk:	Special precautions for user	Special provisions limited quantity 5 L

#### Air transport (ICAO-IATA / DGR)

UN number	1593	Packing group	III
UN proper shipping name	Dichloromethane	Environmental hazard	No relevant data
Transport hazard class(es)	ICAO/IATA Class: 6.1 ICAO / IATA Subrisk: ERG Code: 6L	Special precautions for user	Special provisions: Cargo Only Packing Instructions: 663 Cargo Only Maximum Qty / Pack: 220 L Passenger and Cargo Packing Instructions: 655 Passenger and Cargo Maximum Qty / Pack: 60 L Passenger and Cargo Limited Quantity Packing Instructions: Y642 Passenger and Cargo Maximum Qty / Pack: 2 L

#### Sea transport (IMDG-Code / GGVSee)

UN number	1593	Packing group	III
UN proper shipping name	DICHLOROMETHANE	Environmental hazard	No relevant data
Transport hazard class(es)	IMDG Class: 6.1 IMDG Subrisk:	Special precautions for user	EMS Number: F-A,S-A Special provisions: Limited Quantities: 5 L

## SECTION 15 Regulatory information

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

#### methylene chloride(75-09-2) is found on the following regulatory lists

"Australia National Pollutant Inventory", "Australia - Australian Capital Territory - Environment Protection Regulation: Ambient environmental standards (AQUA/1 to 6 - non-pesticide anthropogenic organics)", "Australia Hazardous Substances Information System - Consolidated Lists", "Australia - Australian Capital Territory - Environment Protection Regulation: Ambient environmental standards (Domestic water supply - organic compounds)", "WHO Guidelines for Drinking-water Quality - Guideline values for chemicals that are of health significance in drinking-water", "Australia - Australian Capital Territory - Environment Protection Regulation: Pollutants entering waterways taken to cause environmental harm (Aquatic habitat)", "Australia - Australian Capital Territory - Environment Protection Regulation: Pollutants entering waterways taken to cause environmental harm - Domestic water supply quality", "OECD List of High Production Volume (HPV) Chemicals", "Australia High Volume Industrial Chemical List (HVICL)", "International Council of Chemical Associations (ICCA) - High Production Volume List", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix E (Part 2)", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix F (Part 3)", "Australia Inventory of Chemical Substances (AICS)", "International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC Monographs", "Australia Exposure Standards", "United Nations Consolidated List of Products Whose Consumption and/or Sale Have Been Banned, Withdrawn, Severely Restricted or Not Approved by Governments", "Australia FAISD Handbook - First Aid Instructions, Warning Statements, and General Safety Precautions", "GESAMP/EHS Composite List - GESAMP Hazard Profiles", "Australia Drinking Water Guideline Values For Physical and Chemical Characteristics", "FisherTransport Information", "Sigma-AldrichTransport Information", "IMO IBC Code Chapter 17: Summary of minimum requirements", "IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk", "Regulations concerning the International Carriage of Dangerous Goods by Rail - Table A: Dangerous Goods List - RID 2013 (English)", "International Maritime Dangerous Goods Requirements (IMDG Code)", "International Maritime Dangerous Goods Requirements (IMDG Code) - Substance Index", "Australia Dangerous Goods Code (ADG Code) - List of Emergency Action Codes", "Australia Dangerous Goods Code (ADG Code) - Dangerous Goods List", "International Air Transport Association (IATA) Dangerous Goods Regulations", "OSPAR National List of Candidates for Substitution - Norway", "WHO Guidelines for Drinking-water Quality - Chemicals for which guideline values have not been established", "Australia - Australian Capital Territory - Environment Protection Regulation: Ambient environmental standards (Domestic water supply - inorganic chemicals)", "Australia - Australian Capital Territory - Environment Protection Regulation: Pollutants entering waterways taken to cause environmental harm (IRRIG)", "Australia - Australian Capital Territory - Environment Protection Regulation: Pollutants entering waterways taken to cause environmental harm (STOCK)", "Australia - Australian Capital Territory - Environment Protection Regulation: Ambient environmental

## SECTION 16 Other information

### Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

A list of reference resources used to assist the committee may be found at:

[www.chemwatch.net/references](http://www.chemwatch.net/references)

The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

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