

Safety Data Sheet

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This Safety Data Sheet has been prepared in accordance with the Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice (Safe Work Australia, December 2011)

SECTION 1: Identification

1.1. Product identifier

3M Avagard(TM) Antiseptic Hand and Body Wash with Chlorhexidine Gluconate 2%w/w 9232H, 9232P, 9232A & 9232D

Product Identification Numbers

AH-0106-1540-1 AH-1000-1010-9 AH-1000-1011-7 AH-1000-1012-5

1.2. Recommended use and restrictions on use

Recommended use

For antiseptic hand and body washing - Topical Antiseptic Solution with Moisturiser and Emollient.

For Professional use only.

1.3. Supplier's details

Address: 3M Australia - Building A, 1 Rivett Road, North Ryde NSW 2113

Telephone: 136 136

E Mail: productinfo.au@mmm.com

Website: www.3m.com.au

1.4. Emergency telephone number

EMERGENCY: 1800 097 146 (Australia only)

SECTION 2: Hazard identification

This product is classified as a hazardous chemical according to the Model Work Health and Safety Regulations, 2011, in accordance with applicable State and Territory legislation.

Refer to Section 14 of this Safety Data Sheets for product Dangerous Goods Classification.

2.1. Classification of the substance or mixture

Flammable liquid: Category 3.

Serious Eye Damage/Irritation: Category 2.

2.2. Label elements

The label elements below were prepared in accordance with the Code of Practice on Preparation of Safety Data Sheets for Hazardous Chemicals (Safe Work Australia, December 2011). This information may be different from the actual product

label.

Signal word

WARNING!

Symbols

Flame | Exclamation mark |

Pictograms



Hazard statements

H226 Flammable liquid and vapour.

H319 Causes serious eye irritation.

Precautionary statements

Prevention:

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P240 Ground/bond container and receiving equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P233 Keep container tightly closed.

P241 Use explosion-proof electrical/ventilating/lighting equipment.

P280B Wear protective gloves and eye/face protection.

P264 Wash thoroughly after handling.

Response:

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin

with water/shower.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical advice/attention.

P370 + P378G In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry

chemical or carbon dioxide to extinguish.

Storage:

P403 + P235 Store in a well-ventilated place. Keep cool.

Disposal:

P501 Dispose of contents/container in accordance with applicable

local/regional/national/international regulations.

2.3. Other assigned/identified product hazards

None known.

2.4. Other hazards which do not result in classification

Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

SECTION 3: Composition/information on ingredients

This material is a mixture.

Ingredient	CAS Nbr	% by Weight	
Water	7732-18-5	60 - 100	
Propan-1-ol	71-23-8	5 - 10	
Chlorhexidine Gluconate	18472-51-0	1 - 5	
Coconut Oil Diethanolamide	8051-30-7	1 - 5	
D-Glucopyranoside, decyl	54549-25-6	1 - 5	
2-Phenoxyethanol	122-99-6	0.5 - 1.5	
Glycerol	56-81-5	0.5 - 1.5	
Diethanolamine	111-42-2	0.05 - 0.15	

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation

Remove person to fresh air. If signs/symptoms develop, get medical attention.

Skin contact

No need for first aid is anticipated. If signs/symptoms persist, get medical attention.

Eve contact

Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention.

If swallowed

Rinse mouth. Do not induce vomiting. Get immediate medical attention.

4.2. Most important symptoms and effects, both acute and delayed

See Section 11.1. Information on toxicological effects.

4.3. Indication of any immediate medical attention and special treatment required

Not applicable

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

5.2. Special hazards arising from the substance or mixture

Closed containers exposed to heat from fire may build pressure and explode.

Hazardous Decomposition or By-Products

Substance	Condition
Hydrocarbons.	During combustion.
Carbon monoxide.	During combustion.
Carbon dioxide.	During combustion.

5.3. Special protective actions for fire-fighters

Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. Wear full protective clothing, including helmet, self-contained, positive pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering

for exposed areas of the head.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. WARNING! A motor could be an ignition source and could cause flammable gases or vapours in the spill area to burn or explode. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions

Avoid release to the environment. For larger spills, cover drains and build dykes to prevent entry into sewer systems or bodies of water.

6.3. Methods and material for containment and cleaning up

Contain spill. Cover spill area with a fire extinguishing foam that is resistant to polar solvents Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible using non-sparking tools. Place in a metal container approved for transportation by appropriate authorities. Clean up residue with water. Seal the container. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid eye contact. For industrial/occupational use only. Not for consumer sale or use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.) Wear low static or properly grounded shoes. To minimize the risk of ignition, determine applicable electrical classifications for the process using this product and select specific local exhaust ventilation equipment to avoid flammable vapour accumulation. Ground/bond container and receiving equipment if there is potential for static electricity accumulation during transfer.

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store away from heat. Store away from acids. Store away from oxidising agents.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Ingredient	CAS Nbr	Agency	Limit type	Additional comments
Diethanolamine	111-42-2	ACGIH	TWA(inhalable fraction and	A3: Confirmed animal
			vapour):1 mg/m3	carcinogen. Danger of
				cutaneous absorption.
Diethanolamine	111-42-2	Australia OELs	TWA(8 hours): 13 mg/m3 (3	
			ppm)	

Glycerol	56-81-5	Australia OELs	TWA(Inspirable dust)(8	
			hours):10 mg/m3	
Propan-1-ol	71-23-8	ACGIH	TWA:100 ppm	A4: Not class. as human
				carcin
Propan-1-ol	71-23-8	Australia OELs	TWA(8 hours): 492 mg/m3	SKIN
			(200 ppm); STEL(15	
			minutes): 614 mg/m3 (250	
			ppm)	

ACGIH: American Conference of Governmental Industrial Hygienists

AIHA: American Industrial Hygiene Association

Australia OELs: Australia. Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment

CMRG: Chemical Manufacturer's Recommended Guidelines

TWA: Time-Weighted-Average STEL: Short Term Exposure Limit

CEIL: Ceiling Sen: Sensitiser

Sk: Absorption through the skin may be a significant source of exposure.

8.2. Exposure controls

8.2.1. Engineering controls

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapours/spray. If ventilation is not adequate, use respiratory protection equipment. Use explosion-proof ventilation equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Eye protection not required. Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Indirect vented goggles.

Select and use eye protection in accordance with AS/NZS 1336. Eye protection should comply with the performance specifications of AS/NZS 1337.

Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing. No chemical protective gloves are required. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity.

Gloves made from the following material(s) are recommended: Nitrile rubber.

Polymer laminate

Select and use gloves according to AS/NZ 2161.

Respiratory protection

Under normal use conditions, airborne exposures are not expected to be significant enough to require respiratory protection. An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapours and particulates

For questions about suitability for a specific application, consult with your respirator manufacturer. Select and use respirators according to AS/NZS 1715. Respirators should comply with AS/NZS 1716 performance

specifications. For information about respirators, call 3M on 1800 024 464.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Liquid.
Specific Physical Form: Viscous.

Colour Aqua

Odour Fresh Odour, Fruity Odour

Odour threshold *No data available.*

pH 5-6

Melting point/Freezing point No data available. Boiling point/Initial boiling point/Boiling range90 - 105 °C

Flash point 52.8 °C [Details:No sustained combustion]

Evaporation rate

Flammability (solid, gas)

Flammable Limits(LEL)

Flammable Limits(UEL)

Vapour pressure

Vapour density

No data available.

Relative density 0.98 - 1.04 [*Ref Std*:WATER=1]

Water solubility Complete

Solubility- non-water No data available. Partition coefficient: n-octanol/water No data available. **Autoignition temperature** No data available. **Decomposition temperature** No data available. Viscosity 500 - 1,500 mPa-s No data available. Volatile organic compounds (VOC) No data available Percent volatile VOC less H2O & exempt solvents No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section

10.2 Chemical stability

Stable.

10.3. Conditions to avoid

Not determined

10.4. Possibility of hazardous reactions

Hazardous polymerisation will not occur.

10.5 Incompatible materials

Not determined

10.6 Hazardous decomposition products

<u>Substance</u> <u>Condition</u>

None known.

SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labelling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1 Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation

Respiratory tract irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Skin contact

Contact with the skin during product use is not expected to result in significant irritation. Allergic Skin Reaction (non-photo induced) in sensitive people: Signs/symptoms may include redness, swelling, blistering, and itching.

May cause additional health effects (see below).

Eye contact

Severe eye irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

Ingestion

Gastrointestinal irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhoea.

Additional Health Effects:

Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Inhalation-Vapour(4 hr)		No data available; calculated ATE >50 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Propan-1-ol	Dermal	Rabbit	LD50 4,000 mg/kg
Propan-1-ol	Inhalation-Vapour (4 hours)	Rat	LC50 > 34 mg/l
Propan-1-ol	Ingestion	Rat	LD50 estimated to be 2,000 - 5,000 mg/kg
Chlorhexidine Gluconate	Dermal	Rabbit	LD50 > 5,000 mg/kg
Chlorhexidine Gluconate	Ingestion	Rat	LD50 2,000 mg/kg
Glycerol	Dermal	Rabbit	LD50 estimated to be > 5,000 mg/kg

Glycerol	Ingestion	Rat	LD50 > 5,000 mg/kg
2-Phenoxyethanol	Dermal	Rabbit	LD50 > 2,000 mg/kg
2-Phenoxyethanol	Inhalation-Dust/Mist	Rat	LC50 > 1.5 mg/l
2-Phenoxyethanol	Ingestion	Rat	LD50 1,260 mg/kg
Diethanolamine	Dermal	Rabbit	LD50 8,180 mg/kg
Diethanolamine	Ingestion	Rat	LD50 1,410 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Propan-1-ol	Rabbit	Minimal irritation
Chlorhexidine Gluconate	Rabbit	No significant irritation
Glycerol	Rabbit	No significant irritation
2-Phenoxyethanol	Rabbit	No significant irritation
Diethanolamine	Rabbit	Mild irritant

Serious Eye Damage/Irritation

Serious Eye Eumuge, Illieuwon			
Name	Species	Value	
Propan-1-ol	Rabbit	Severe irritant	
Chlorhexidine Gluconate	Rabbit	Corrosive	
Glycerol	Rabbit	No significant irritation	
2-Phenoxyethanol	Rabbit	Corrosive	
Diethanolamine	Rabbit	Severe irritant	

Skin Sensitisation

Name	Species	Value
Propan-1-ol	Guinea pig	Not classified
Chlorhexidine Gluconate	Human and animal	Some positive data exist, but the data are not
		sufficient for classification
Glycerol	Guinea pig	Not classified
2-Phenoxyethanol	Guinea pig	Not classified
Diethanolamine	Human and animal	Not classified

Respiratory Sensitisation

For the component/components, either no data are currently available or the data are not sufficient for classification.

Germ Cell Mutagenicity

Oct in Cen Mutagementy		
Name	Route	Value
Propan-1-ol	In Vitro	Some positive data exist, but the data are not sufficient for classification
Chlorhexidine Gluconate	In Vitro	Not mutagenic
Chlorhexidine Gluconate	In vivo	Not mutagenic
Diethanolamine	In Vitro	Not mutagenic

Carcinogenicity

Carcinogenicity			
Name	Route	Species	Value
Propan-1-ol	Ingestion	Rat	Some positive data exist, but the data are not sufficient for classification
Chlorhexidine Gluconate	Ingestion	Multiple animal species	Not carcinogenic
Glycerol	Ingestion	Mouse	Some positive data exist, but the data are not sufficient for classification

Diethanolamine	Dermal	Mouse	Carcinogenic.
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Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
Propan-1-ol	Inhalation	Not classified for	Rat	NOAEL 8.6	6 weeks
		male reproduction		mg/l	
Propan-1-ol	Inhalation	Not classified for	Rat	NOAEL 8.6	during gestation
		development		mg/l	
Chlorhexidine	Ingestion	Not classified for	Rat	NOAEL 30	during gestation
Gluconate		development		mg/kg/day	
Glycerol	Ingestion	Not classified for	Rat	NOAEL	2 generation
		female reproduction		2,000	
				mg/kg/day	
Glycerol	Ingestion	Not classified for	Rat	NOAEL	2 generation
		male reproduction		2,000	
				mg/kg/day	
Glycerol	Ingestion	Not classified for	Rat	NOAEL	2 generation
		development		2,000	
				mg/kg/day	
Diethanolamine	Ingestion	Not classified for	Rat	NOAEL 97	13 weeks
		male reproduction		mg/kg/day	
Diethanolamine	Dermal	Not classified for	Rabbit	NOAEL 100	during
		development		mg/kg/day	organogenesis
Diethanolamine	Ingestion	Not classified for	Rat	NOAEL 50	during
		development		mg/kg/day	organogenesis

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Propan-1-ol	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Mouse	NOAEL 5 mg/l	4 hours
Propan-1-ol	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL Not available	
Propan-1-ol	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	
Chlorhexidine Gluconate	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
2- Phenoxyethan ol	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
Diethanolami ne	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL not available	
Diethanolami	Ingestion	kidney and/or	May cause	Rat	NOAEL 200	not applicable

ne		bladder	damage to organs		mg/kg	
Diethanolami	Ingestion	central nervous	Some positive	Rat	LOAEL 200	not applicable
ne		system	data exist, but the		mg/kg	
		depression	data are not			
			sufficient for			
			classification			
Diethanolami	Ingestion	liver	Not classified	Rat	NOAEL 1,600	not applicable
ne					mg/kg	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Propan-1-ol	Ingestion	hematopoietic system	Not classified	Rat	NOAEL 70 mg/kg/day	83 weeks
Propan-1-ol	Ingestion	liver	Not classified	Rat	LOAEL 70 mg/kg/day	83 weeks
Chlorhexidine Gluconate	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Dog	NOAEL 0.89 mg/kg/day	1 years
Chlorhexidine Gluconate	Ingestion	immune system	Not classified	Rabbit	NOAEL 71 mg/kg/day	2 years
Chlorhexidine Gluconate	Ingestion	hematopoietic system kidney and/or bladder	Not classified	Rat	NOAEL 71 mg/kg/day	2 years
Glycerol	Inhalation	respiratory system heart liver kidney and/or bladder	Not classified	Rat	NOAEL 3.91 mg/l	14 days
Glycerol	Ingestion	endocrine system hematopoietic system liver kidney and/or bladder	Not classified	Rat	NOAEL 10,000 mg/kg/day	2 years
Diethanolami ne	Dermal	hematopoietic system	May cause damage to organs though prolonged or repeated exposure	Rat	LOAEL 32 mg/kg/day	13 weeks
Diethanolami ne	Dermal	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 8 mg/kg/day	2 years
Diethanolami ne	Dermal	liver	Not classified	Rat	NOAEL 500 mg/kg/day	13 weeks
Diethanolami ne	Inhalation	liver kidney and/or bladder	Not classified	Rat	NOAEL 0.03 mg/l	13 weeks
Diethanolami ne	Ingestion	hematopoietic system	May cause damage to organs though prolonged or repeated exposure	Rat	NOAEL 14 mg/kg/day	13 weeks
Diethanolami ne	Ingestion	nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 57 mg/kg/day	13 weeks

Diethanolami	Ingestion	kidney and/or	Not classified	Rat	NOAEL not	13 weeks
ne		bladder			available	
Diethanolami	Ingestion	liver	Not classified	Rat	NOAEL 436	13 weeks
ne					mg/kg/day	

Aspiration Hazard

For the component/components, either no data are currently available or the data are not sufficient for classification.

Exposure Levels

Refer Section 8.1 Control Parameters of this Safety Data Sheet.

Interactive Effects

Not determined.

SECTION 12: Ecological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. Additional information leading to material classification in Section 2 is available upon request. In addition, environmental fate and effects data on ingredients may not be reflected in this section because an ingredient is present below the threshold for labelling, an ingredient is not expected to be available for exposure, or the data is considered not relevant to the material as a whole.

12.1. Toxicity

Acute aquatic hazard:

GHS Acute 1: Very toxic to aquatic life.

Chronic aquatic hazard:

GHS Chronic 2: Toxic to aquatic life with long lasting effects.

No product test data available.

Material	CAS Number	Organism	Type	Exposure	Test endpoint	Test result
Propan-1-ol	71-23-8	Algae other	Experimental	96 hours	EC50	4,480 mg/l
Propan-1-ol	71-23-8	Fathead	Experimental	96 hours	LC50	4,555 mg/l
		minnow				
Propan-1-ol	71-23-8	Fish	Experimental	96 hours	LC50	3,000 mg/l
Propan-1-ol	71-23-8	Water flea	Experimental	48 hours	EC50	3,642 mg/l
Propan-1-ol	71-23-8	Water flea	Experimental	21 days	NOEC	>100 mg/l
Chlorhexidine	18472-51-0	Green algae	Experimental	72 hours	EC50	0.081 mg/l
Gluconate						
Chlorhexidine	18472-51-0	Water flea	Experimental	48 hours	EC50	0.087 mg/l
Gluconate						
Chlorhexidine	18472-51-0	Zebra Fish	Experimental	96 hours	LC50	2.08 mg/l
Gluconate						
Chlorhexidine	18472-51-0	Green algae	Experimental	72 hours	NOEC	0.007 mg/l
Gluconate						
Chlorhexidine	18472-51-0	Water flea	Experimental	21 days	NOEC	0.021 mg/l
Gluconate						
Coconut Oil	8051-30-7	Green algae	Estimated	96 hours	EC50	2.2 mg/l
Diethanolamid						
e						
Coconut Oil	8051-30-7	Water flea	Estimated	48 hours	EC50	2.39 mg/l
Diethanolamid						
e				1		

8051-30-7	Zebra Fish	Estimated	96 hours	LC50	3.6 mg/l
8051-30-7	Green algae	Estimated	72 hours	NOEC	0.32 mg/l
8051-30-7	Water flea	Estimated	21 days	NOEC	0.07 mg/l
54549-25-6					
122-99-6		Experimental	96 hours	LC50	344 mg/l
	minnow				
122-99-6	Green algae	Experimental	72 hours	EC50	>500 mg/l
			/ =		
122-99-6	Scud	Experimental	96 hours	LC50	357 mg/l
		1			
122-99-6	Water flea	Experimental	48 hours	LC50	488 mg/l
					54,000 mg/l
	Water flea			LC50	1,955 mg/l
111-42-2	Fathead	Experimental	96 hours	LC50	100 mg/l
	minnow				
111-42-2	Green algae	Experimental	72 hours	EC50	9.5 mg/l
111-42-2	Water flea	Experimental	48 hours	LC50	2.15 mg/l
111-42-2	Green algae	Experimental	72 hours	NOEC	0.6 mg/l
		1			
111-42-2	Water flea	Experimental	21 days	NOEC	0.78 mg/l
		•			
	8051-30-7 8051-30-7 54549-25-6 122-99-6 122-99-6 122-99-6 56-81-5 56-81-5 111-42-2 111-42-2 111-42-2	8051-30-7 Green algae 8051-30-7 Water flea 54549-25-6 122-99-6 Fathead minnow 122-99-6 Green algae 122-99-6 Water flea 56-81-5 Rainbow trout 56-81-5 Water flea 111-42-2 Fathead minnow 111-42-2 Green algae 111-42-2 Green algae	8051-30-7 Green algae Estimated 8051-30-7 Water flea Estimated 54549-25-6 Data not available or insufficient for classification 122-99-6 Fathead Experimental 122-99-6 Green algae Experimental 122-99-6 Scud Experimental 122-99-6 Water flea Experimental 56-81-5 Rainbow trout Experimental 56-81-5 Water flea Experimental 111-42-2 Green algae Experimental 111-42-2 Green algae Experimental 111-42-2 Green algae Experimental	8051-30-7 Green algae Estimated 72 hours 8051-30-7 Water flea Estimated 21 days 54549-25-6 Data not available or insufficient for classification 122-99-6 Fathead Experimental 96 hours 122-99-6 Scud Experimental 96 hours 122-99-6 Water flea Experimental 48 hours 122-99-6 Water flea Experimental 96 hours 56-81-5 Rainbow trout Experimental 48 hours 56-81-5 Water flea Experimental 48 hours 111-42-2 Fathead Experimental 96 hours 111-42-2 Green algae Experimental 72 hours 111-42-2 Green algae Experimental 48 hours 111-42-2 Green algae Experimental 72 hours	8051-30-7 Green algae Estimated 72 hours NOEC 8051-30-7 Water flea Estimated 21 days NOEC 54549-25-6 Data not available or insufficient for classification 122-99-6 Fathead Experimental 96 hours LC50 122-99-6 Green algae Experimental 72 hours EC50 122-99-6 Water flea Experimental 48 hours LC50 56-81-5 Rainbow trout Experimental 48 hours LC50 56-81-5 Water flea Experimental 48 hours LC50 111-42-2 Fathead Experimental 96 hours LC50 111-42-2 Green algae Experimental 72 hours EC50 111-42-2 Green algae Experimental 72 hours NOEC

12.2. Persistence and degradability

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
Propan-1-ol	71-23-8	Experimental	20 days	BOD	73 %	OECD 301D - Closed
		Biodegradation	-		BOD/ThBOD	bottle test
Chlorhexidine	18472-51-0	Experimental	28 days	Dissolv.	71 % weight	OECD 301A - DOC
Gluconate		Biodegradation	-	Organic		Die Away Test
				Carbon Deplet		-
Coconut Oil	8051-30-7	Estimated	28 days	BOD	71 % weight	OECD 301D - Closed
Diethanolamid		Biodegradation				bottle test
e						
D-	54549-25-6	Estimated	28 days	BOD	89 % weight	OECD 301C - MITI
Glucopyranosi		Biodegradation	-			test (I)
de, decyl						
2-	122-99-6	Experimental	28 days	BOD	90 % weight	OECD 301F -
Phenoxyethano		Biodegradation	_			Manometric

1						respirometry
Glycerol	56-81-5	Experimental	14 days	BOD	63 %	OECD 301C - MITI
		Biodegradation			BOD/ThBOD	test (I)
Diethanolamin	111-42-2	Experimental	10 days	BOD	72 % weight	OECD 301D - Closed
e		Biodegradation				bottle test

12.3 : Bioaccumulative potential

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
Propan-1-ol	71-23-8	Experimental		Log Kow	0.2	Other methods
		Bioconcentrati				
		on				
Chlorhexidine	18472-51-0	Experimental		Log Kow	-1.81	Other methods
Gluconate		Bioconcentrati				
		on				
Coconut Oil	8051-30-7	Estimated		Bioaccumulatio	5.8	Estimated:
Diethanolamid		Bioconcentrati		n factor		Bioconcentration factor
e		on				
D-	54549-25-6	Estimated		Bioaccumulatio	2.5	Estimated:
Glucopyranosi		Bioconcentrati		n factor		Bioconcentration factor
de, decyl		on				
2-	122-99-6	Experimental		Log Kow	1.16	Other methods
Phenoxyethano		Bioconcentrati				
1		on				
Glycerol	56-81-5	Experimental		Log Kow	-1.76	Other methods
		Bioconcentrati				
		on				
Diethanolamin	111-42-2	Experimental		Log Kow	-2.18	Other methods
e		Bioconcentrati				
		on				

12.4. Mobility in soil

Please contact manufacturer for more details

12.5 Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Disposal methods

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Incinerate in a permitted waste incineration facility. Combustion products will include halogen acid (HCl/HF/HBr). Facility must be capable of handling halogenated materials. As a disposal alternative, utilize an acceptable permitted waste disposal facility.

SECTION 14: Transport Information

Australian Dangerous Goods Code (ADG) - Road/Rail Transport

UN No.: Not applicable.

Proper shipping name: Not applicable.

Class/Division: Not applicable. Sub Risk: Not applicable. Packing Group: Not applicable.

Special Instructions: Not restricted as per ADG Code 2.3.1.3 (a). This product is not classified as a flammable liquid as the product has a flash point of more than 35°C and does not sustain combustion when tested according to the UN Manual of Tests and Criteria, Part III, subsection 35.5.2 Sustained Combustibility Test

Hazchem Code: Not applicable

IERG: Not applicable.

International Air Transport Association (IATA) - Air Transport

UN No.: Not applicable.

Proper shipping name: Not applicable. **Class/Division:** Not applicable.

Sub Risk: Not applicable. **Packing Group:** Not applicable.

Special Instructions: Not restricted as per IATA 3.3.1.3 (a). This product is not classified as a flammable liquid as the product has a flash point of more than 35°C and does not sustain combustion when tested according to the UN Manual of Tests and Criteria, Part III, subsection 35.5.2 Sustained Combustibility Test.

International Maritime Dangerous Goods Code (IMDG)- Marine Transport

UN No.: Not applicable.

Proper shipping name: Not applicable. **Class/Division:** Not applicable.

Sub Risk: Not applicable.

Packing Group: Not applicable.

Marine Pollutant: Not applicable.

Special Instructions: Not restricted per IMDG Code 2.3.1.3.1. This product is not classified as a flammable liquid as the product has a flash point of more than 35°C and does not sustain combustion when tested according to the UN Manual of Tests and Criteria, Part III, subsection 35.5.2 Sustained Combustibility Test.

SECTION 15: Regulatory information

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

Australian Inventory Status:

This product is regulated by the Therapeutics Goods Administration and is exempt from compliance with the Industrial Chemicals (Notification and Assessment) Act 1989 as amended.

Poison Schedule: This product is intended for Industrial or Professional Use only and therefore is not packaged and labelled in accordance with the requirements of the Standard for the Uniform Scheduling of Medicines and Poisons.

SECTION 16: Other information

Revision information:

Complete document review.

DISCLAIMER: The information on this Safety Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Safety Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications.

Greenguard ® is a United States based program. The 'Low VOC' reference related to United States Federal and State regulations exemptions for some solvents.

3M Australia SDSs are available at www.3m.com.au