

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

3MTM AvagardTM Antiseptic Hand & Body Wash (Chlorhexidine Gluconate 2% w/w)

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 Eve 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, hot surfaces, sparks, open flames and other ignition sources.

No smoking.

P233 Keep container tightly closed.

P240 Ground and bond container and receiving equipment.

P241 Use explosion-proof electrical, ventilating and lighting equipment.

P242 Use non-sparking tools.

P243 Take action to prevent static discharges.
P264 Wash thoroughly after handling.

P280E Wear protective gloves.

Response:

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

with water or 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 + P378 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
Chlorhexdine Gluconate	18472-51-0	1 - 5
Coconut Oil Diethanolamide	8051-30-7	1 - 5
Decyl Glucoside	54549-25-6	1 - 5
Glycerin	56-81-5	1 - 5
2-Phenoxyethanol	122-99-6	0.5 - 1.5
Amines, Coco Alkyldimethyl, N-Oxides	61788-90-7	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

No critical symptoms or effects. 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

SubstanceConditionHydrocarbons.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 or 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		ACGIH	TWA(inhalable fraction and	A3: Confirmed animal
			vapour):1 mg/m3	carcinogen. Danger of
				cutaneous absorption.
Diethanolamine		Australia OELs	TWA(8 hours): 13 mg/m3 (3	
			ppm)	
Glycerin		Australia OELs	TWA(Inspirable dust)(8	

3MTM AvagardTM Antiseptic Hand & Body Wash (Chlorhexidine Gluconate 2% w/w)

		hours):10 mg/m3	
Propan-1-ol	ACGII	H TWA:100 ppm	A4: Not class. as human
			carcin
Propan-1-ol	Austra	alia OELs TWA(8 hours): 492 mg/m3	3 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 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.

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

Nitrile rubber.

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 range	90 - 105 °C
Flash point	52.8 °C [Details: No sustained combustion]
Evaporation rate	No data available.
Flammability (solid, gas)	Not applicable.
Flammable Limits(LEL)	No data available.
Flammable Limits(UEL)	No data available.
Vapour pressure	No data available.
Vapor Density and/or Relative Vapor Density	No data available.
Density	No data available.
Relative density	0.98 - 1.04 [<i>Ref Std:</i> 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/Kinematic Viscosity	500 - 1,500 mPa-s
Volatile organic compounds (VOC)	No data available.
Percent volatile	No data available.
VOC less H2O & exempt solvents	No data available.
Kinematic Viscosity	No data available.

Nanoparticles

This material does not contain nanoparticles.

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

Substance Condition

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).

Eve 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
Chlorhexdine Gluconate	Dermal	Rabbit	LD50 > 5,000 mg/kg
Chlorhexdine Gluconate	Ingestion	Rat	LD50 2,000 mg/kg
Glycerin	Dermal	Rabbit	LD50 estimated to be > 5,000 mg/kg

Glycerin	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 1,394 mg/kg
Amines, Coco Alkyldimethyl, N-	Dermal		LD50 estimated to be 2,000 - 5,000 mg/kg
Oxides			
Amines, Coco Alkyldimethyl, N-	Ingestion	Rat	LD50 > 2,000 mg/kg
Oxides			
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
Chlorhexdine Gluconate	Rabbit	No significant irritation
Glycerin	Rabbit	No significant irritation
2-Phenoxyethanol	Rabbit	No significant irritation
Amines, Coco Alkyldimethyl, N-Oxides	Professional judgement	Mild irritant
Diethanolamine	Rabbit	Mild irritant

Serious Eye Damage/Irritation

crious Lyc Dumage, irritation				
Name	Species	Value		
	- P			
Propan-1-ol	Rabbit	Severe irritant		
Chlorhexdine Gluconate	Rabbit	Corrosive		
Glycerin	Rabbit	No significant irritation		
2-Phenoxyethanol	Rabbit	Corrosive		
Amines, Coco Alkyldimethyl, N-Oxides	Professional judgement	Corrosive		
Diethanolamine	Rabbit	Severe irritant		

Skin Sensitisation

Name	Species	Value
Propan-1-ol	Guinea pig	Not classified
Chlorhexdine Gluconate	Human and animal	Some positive data exist, but the data are not
		sufficient for classification
Glycerin	Guinea pig	Not classified
2-Phenoxyethanol	Guinea pig	Not classified
Amines, Coco Alkyldimethyl, N-Oxides	similar compounds	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

Name	Route	Value
Propan-1-ol	In Vitro	Some positive data exist, but the data are not sufficient for classification
Chlorhexdine Gluconate	In Vitro	Not mutagenic
Chlorhexdine Gluconate	In vivo	Not mutagenic
2-Phenoxyethanol	In Vitro	Not mutagenic
2-Phenoxyethanol	In vivo	Not mutagenic
Diethanolamine	In Vitro	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Propan-1-ol	Ingestion	Rat	Some positive data exist, but the data are not sufficient for classification
Chlorhexdine Gluconate	Ingestion	Multiple animal species	Not carcinogenic
Glycerin	Ingestion	Mouse	Some positive data exist, but the data are not sufficient for classification
2-Phenoxyethanol	Ingestion	Multiple animal species	Not carcinogenic
Diethanolamine	Dermal	Mouse	Carcinogenic.

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	
Chlorhexdine	Ingestion	Not classified for	Rat	NOAEL 30	during gestation
Gluconate		development		mg/kg/day	
Glycerin	Ingestion	Not classified for	Rat	NOAEL	2 generation
•		female reproduction		2,000	
		_		mg/kg/day	
Glycerin	Ingestion	Not classified for	Rat	NOAEL	2 generation
		male reproduction		2,000	
				mg/kg/day	
Glycerin	Ingestion	Not classified for	Rat	NOAEL	2 generation
		development		2,000	
				mg/kg/day	
2-Phenoxyethanol	Ingestion	Not classified for	Mouse	NOAEL	2 generation
		female reproduction		3,700	
		_		mg/kg/day	
2-Phenoxyethanol	Ingestion	Not classified for	Mouse	NOAEL	2 generation
		male reproduction		3,700	
				mg/kg/day	
2-Phenoxyethanol	Dermal	Not classified for	Rabbit	NOAEL 600	during
		development		mg/kg/day	organogenesis
2-Phenoxyethanol	Ingestion	Not classified for	Rat	NOAEL	during gestation
		development		1,000	
				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	Some positive	Mouse	NOAEL Not	

		irritation	data exist, but the data are not sufficient for classification		available	
Propan-1-ol	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	
Chlorhexdine 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	May cause respiratory irritation	official classification	NOAEL Not available	
Amines, Coco Alkyldimethyl , N-Oxides	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
Diethanolami ne	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL not available	
Diethanolami ne	Ingestion	kidney and/or bladder	May cause damage to organs	Rat	NOAEL 200 mg/kg	not applicable
Diethanolami ne	Ingestion	central nervous system depression	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 200 mg/kg	not applicable
Diethanolami ne	Ingestion	liver	Not classified	Rat	NOAEL 1,600 mg/kg	not applicable

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
Chlorhexdine Gluconate	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Dog	NOAEL 0.89 mg/kg/day	1 years
Chlorhexdine Gluconate	Ingestion	immune system	Not classified	Rabbit	NOAEL 71 mg/kg/day	2 years
Chlorhexdine Gluconate	Ingestion	hematopoietic system kidney and/or bladder	Not classified	Rat	NOAEL 71 mg/kg/day	2 years
Glycerin	Inhalation	respiratory system heart liver kidney and/or bladder	Not classified	Rat	NOAEL 3.91 mg/l	14 days
Glycerin	Ingestion	endocrine system hematopoietic system liver kidney and/or	Not classified	Rat	NOAEL 10,000 mg/kg/day	2 years

D 10 C 10

		bladder				
2- Phenoxyethan ol	Dermal	skin hematopoietic system liver eyes	Not classified	Rabbit	NOAEL 500 mg/kg/day	13 weeks
2- Phenoxyethan ol	Ingestion	heart endocrine system hematopoietic system liver immune system nervous system kidney and/or bladder respiratory system	Not classified	Rat	NOAEL 1,514 mg/kg/day	13 weeks
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 ne	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL not available	13 weeks
Diethanolami ne	Ingestion	liver	Not classified	Rat	NOAEL 436 mg/kg/day	13 weeks

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		Activated	Experimental	3 hours	IC50	>1,000 mg/l
1		sludge	1			
Propan-1-ol		Algae other	Experimental	96 hours	EC50	4,480 mg/l
Propan-1-ol		Fathead	Experimental	96 hours	LC50	4,555 mg/l
1		minnow	1			
Propan-1-ol		Fish	Experimental	96 hours	LC50	3,000 mg/l
Propan-1-ol		Water flea	Experimental	48 hours	EC50	3,642 mg/l
Propan-1-ol		Water flea	Experimental	21 days	NOEC	100 mg/l
Chlorhexdine		Activated	Experimental	3 hours	EC50	25 mg/l
Gluconate		sludge	1			
Chlorhexdine		Green algae	Experimental	72 hours	EC50	0.081 mg/l
Gluconate			1			
Chlorhexdine		Water flea	Experimental	48 hours	EC50	0.087 mg/l
Gluconate			1			
Chlorhexdine		Zebra Fish	Experimental	96 hours	LC50	2.08 mg/l
Gluconate			1			
Chlorhexdine		Green algae	Experimental	72 hours	NOEC	0.007 mg/l
Gluconate			1			
Chlorhexdine		Water flea	Experimental	21 days	NOEC	0.021 mg/l
Gluconate			1			
Coconut Oil		Bacteria	Estimated	30 minutes	NOEC	1,000 mg/l
Diethanolamid						
e						
Coconut Oil		Green algae	Estimated	96 hours	EC50	2.2 mg/l
Diethanolamid						
e						
Coconut Oil		Water flea	Estimated	48 hours	EC50	2.39 mg/l
Diethanolamid						
e						
Coconut Oil		Zebra Fish	Estimated	96 hours	LC50	3.6 mg/l
Diethanolamid						
e						
Coconut Oil		Green algae	Estimated	72 hours	NOEC	0.32 mg/l
Diethanolamid						
e						
Coconut Oil		Water flea	Estimated	21 days	NOEC	0.07 mg/l
Diethanolamid						
e						
Decyl			Data not			N/A
Glucoside			available or			
			insufficient for			
			classification			

Glycerin	Bacteria	Experimental	16 hours	NOEC	10,000 mg/l
Glycerin	Rainbow trout	Experimental	96 hours	LC50	54,000 mg/l
Glycerin	Water flea	Experimental	48 hours	LC50	1,955 mg/l
2- Phenoxyethano	Activated sludge	Experimental	30 minutes	EC50	>1,000 mg/l
2- Phenoxyethano	Fathead minnow	Experimental	96 hours	LC50	344 mg/l
2- Phenoxyethano	Green algae	Experimental	72 hours	EC50	>100 mg/l
2- Phenoxyethano	Scud	Experimental	96 hours	LC50	357 mg/l
2- Phenoxyethano	Water flea	Experimental	48 hours	EC50	>500 mg/l
2- Phenoxyethano	Fathead minnow	Experimental	34 days	NOEC	24 mg/l
2- Phenoxyethano	Green algae	Experimental	72 hours	NOEC	46 mg/l
2- Phenoxyethano	Water flea	Experimental	21 days	NOEC	9.43 mg/l
Amines, Coco Alkyldimethyl, N-Oxides	Bacteria	Experimental	3 hours	EC50	240 mg/l
Amines, Coco Alkyldimethyl, N-Oxides	Green Algae	Experimental	72 hours	EC50	0.29 mg/l
Amines, Coco Alkyldimethyl, N-Oxides	Water flea	Experimental	48 hours	EC50	2.9 mg/l
Amines, Coco Alkyldimethyl, N-Oxides	Zebra Fish	Experimental	96 hours	LC50	1 mg/l
Amines, Coco Alkyldimethyl, N-Oxides	Green Algae	Experimental	72 hours	NOEC	0.08 mg/l
Diethanolamin e	Fathead minnow	Experimental	96 hours	LC50	100 mg/l
Diethanolamin e	Green algae	Experimental	72 hours	EC50	9.5 mg/l
Diethanolamin e	Water flea	Experimental	48 hours	LC50	2.15 mg/l
Diethanolamin e	Green algae	Experimental	72 hours	NOEC	0.6 mg/l
Diethanolamin e	Water flea	Experimental	21 days	NOEC	0.78 mg/l

12.2. Persistence and degradability

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
Propan-1-ol		Experimental	20 days	BOD	73 %	OECD 301D - Closed
		Biodegradation	-		BOD/ThOD	bottle test
Chlorhexdine		Experimental	28 days	Dissolv.	71 % weight	OECD 301A - DOC
Gluconate		Biodegradation	-	Organic		Die Away Test
				Carbon Deplet		
Coconut Oil		Estimated	28 days	BOD	71 % weight	OECD 301D - Closed
Diethanolamid		Biodegradation				bottle test
e						
Decyl		Estimated	28 days	BOD	89 % weight	OECD 301C - MITI
Glucoside		Biodegradation				test (I)
Glycerin		Experimental	14 days	BOD	63 %	OECD 301C - MITI
		Biodegradation			BOD/ThOD	test (I)
2-		Experimental	28 days	BOD	90 %	OECD 301F -
Phenoxyethano		Biodegradation			BOD/ThOD	Manometric
1						respirometry
Amines, Coco		Experimental	28 days	CO2 evolution	80 % weight	Non-standard method
Alkyldimethyl,		Biodegradation				
N-Oxides						
Diethanolamin		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		Experimental Bioconcentrati		Log Kow	0.2	Non-standard method
		on				
Chlorhexdine		Experimental		Log Kow	-1.81	Non-standard method
Gluconate		Bioconcentrati on				
Coconut Oil		Estimated		Bioaccumulatio	5.8	Estimated:
Diethanolamid		Bioconcentrati		n factor		Bioconcentration factor
e		on				
Decyl		Estimated		Bioaccumulatio	2.5	Estimated:
Glucoside		Bioconcentrati		n factor		Bioconcentration factor
		on				
Glycerin		Experimental Bioconcentrati		Log Kow	-1.76	Non-standard method
		on				
2- Phenoxyethano		Experimental Bioconcentrati		Log Kow	1.2	EC A.8 Partition Coefficient
1		on				
Amines, Coco		Data not	N/A	N/A	N/A	N/A
Alkyldimethyl,		available or				
N-Oxides		insufficient for				
		classification				
Diethanolamin		Experimental		Log Kow	-2.18	Non-standard method
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. 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