Safety Data Sheet

Suma Opal L9

Revision: 2016-01-27 **Version:** 01.0

SECTION 1: Identification of the substance/mixture and supplier

1.1 Product identifier
Product name: Suma Opal L9

1.2 Recommended use and restrictions on use
Identified uses:
Warewash detergent and destainer
Restrictions of use:
Uses other than those identified are not recommended

1.3 Details of the supplier
Diversey Australia Pty. Limited
29 Chifley St, Smithfield, NSW, 2164, Australia
Telephone: 1800 647 779 (toll free)
Fax: (02) 9725 5767
Email: aucustserv@sealedair.com
Website: http://www.sealedair.com/

1.4 Emergency telephone number
Call 1800 033 111 (24hrs)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
AUH031
Skin corrosion, Category 1B
Corrosive to metals, Category 1

2.2 Label elements

Signal word: Danger

Hazard statements:
AUH031 - Contact with acids liberates toxic gas.
H314 - Causes severe skin burns and eye damage.
H290 - May be corrosive to metals.

Prevention statement(s):
P233 - Keep container tightly closed.
P234 - Keep only in original container.
P264 - Wash face, hands and any exposed skin thoroughly after handling.
P280 - Wear protective gloves, protective clothing and eye or face protection.

Response statement(s):
P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a POISON CENTRE, doctor or physician.
P321 - Specific treatment (see supplemental first aid instructions on this label).
P363 - Wash contaminated clothing before reuse.
P390 - Absorb spillage to prevent material damage.

Storage statement(s):
P405 - Store locked up.
P406 - Store in corrosive-resistant container with a resistant inner liner.

Disposal statement(s):
P501 - Dispose of unused content as chemical waste.

2.3 Other hazards
No other hazards known.

2.4 Classification diluted product:
Recommended maximum concentration (%): 0.6

Not classified

SECTION 3: Composition/information on ingredients

3.1 Substances / Mixtures

Ingredient(s)	CAS number	EC number	Classification	Weight percent
disodium trisilicate	1344-09-8	215-687-4	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319)	3-10
potassium hydroxide	1310-58-3	215-181-3	Skin Corr. 1A (H314) Acute Tox. 4 (H302) Met. Corr. 1 (H290)	1-3
pentapotassium triphosphate	13845-36-8	237-574-9	Skin Irrit. 2 (H315)	1-3
sodium hypochlorite	7681-52-9	231-668-3	AUH031 Skin Corr. 1B (H314) STOT SE 3 (H335)	1-3

Non-hazardous ingredients are the remainder and add up to 100%.

Workplace exposure limit(s), if available, are listed in subsection 8.1.
For the full text of the H and AUH phrases mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation: Remove person to fresh air and keep comfortable for breathing. Get medical attention or advice if you feel unwell.

Skin contact: Take off immediately all contaminated clothing and wash it before re-use. Immediately call a POISON CENTRE, doctor or physician.

Eye contact: Immediately rinse eyes cautiously with lukewarm water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE, doctor or physician.

Ingestion: Rinse mouth. Immediately drink 1 glass of water. Do NOT induce vomiting. Keep at rest. Immediately call a POISON CENTRE, doctor or physician.

Self-protection of first aider: Consider personal protective equipment as indicated in subsection 8.2.

First aid facilities: Shower and eyewash facilities should be considered in a workplace where necessary.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation: May cause bronchospasm in chlorine sensitive individuals.

Skin contact: Causes severe burns.

Eye contact: Causes severe or permanent damage.

Ingestion: Ingestion will lead to a strong caustic effect on mouth and throat and to the danger of perforation of oesophagus and stomach.

4.3 Indication of any immediate medical attention and special treatment needed
No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

Poison Information Center: Call 13 11 26 (Australia Wide).

SECTION 5: Firefighting measures

5.1 Extinguishing media
Carbon dioxide. Dry powder. Water spray jet. Fight larger fires with water spray jet or alcohol-resistant foam.

5.2 Special hazards arising from the substance or mixture
No special hazards known.

5.3 Advice for firefighters

As in any fire, wear self contained breathing apparatus and suitable protective clothing including gloves and eye/face protection.

5.4 Hazchem code
2X

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
In case of an incident in a confined area wear suitable respiratory protection. Wear suitable protective clothing, gloves and eye/face protection.

6.2 Environmental precautions
Do not allow to enter drainage system, surface or ground water. Dilute with plenty of water.

6.3 Methods and material for containment and cleaning up
Absorb with liquid-binding material (sand, diatomite, universal binders, sawdust).

6.4 Reference to other sections
For personal protective equipment see subsection 8.2. For disposal considerations see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Measures to prevent fire and explosions:
No special precautions required.

Measures required to protect the environment:
For environmental exposure controls see subsection 8.2.

Advices on general occupational hygiene:
Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not mix with other products unless adviced by Sealed Air. Wash hands before breaks and at the end of workday. Wash face, hands and any exposed skin thoroughly after handling. Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. Use personal protective equipment as required. Avoid contact with skin and eyes. Use only with adequate ventilation.

7.2 Conditions for safe storage, including any incompatibilities
Store in accordance with local and national regulations. Keep only in original container. Store in a closed container.
For conditions to avoid see subsection 10.4. For incompatible materials see subsection 10.5.

7.3 Specific end use(s)
No specific advice for end use available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
Workplace exposure limits

Air limit values, if available:

Ingredient(s)	Long term value(s) (TWA)	Short term value(s) (STEL)	Peak value(s)
potassium hydroxide			2 mg/m³

Biological limit values, if available:

8.2 Exposure controls

The following information applies for the uses indicated in subsection 1.2 of the Safety Data Sheet.
If available, please refer to the product information sheet for application and handling instructions.
Normal use conditions are assumed for this section.

Recommended safety measures for handling the undiluted product:
Covering activities such as filling and transfer of product to application equipment, flasks or buckets

Appropriate engineering controls: If the product is diluted by using specific dosing systems with no risk of splashes or direct skin contact, the personal protection equipment as described in this section is not required. Where possible: use in automated/closed system and cover open containers. Transport over pipes. Filling with automatic systems. Use tools for manual handling of product.

Appropriate organisational controls: Avoid direct contact and/or splashes where possible. Train personnel.

Personal protective equipment

Eye / face protection: Safety glasses or goggles (EN 166). The use of a full-face shield or other full-face protection is strongly recommended when handling open containers or if splashes may occur.

Hand protection: Chemical-resistant protective gloves (EN 374).

Verify instructions regarding permeability and breakthrough time, as provided by the gloves supplier.
Consider specific local use conditions, such as risk of splashes, cuts, contact time and temperature.

Suggested gloves for prolonged contact:
Material: butyl rubber
Penetration time: >= 480 min
Material thickness: >= 0.7 mm

Suggested gloves for protection against splashes:
Material: nitrile rubber
Penetration time: >= 30 min
Material thickness: >= 0.4 mm

In consultation with the supplier of protective gloves a different type providing similar protection may be chosen.

Body protection: Wear chemical-resistant clothing and boots in case direct dermal exposure and/or splashes may occur.

Respiratory protection: No special requirements under normal use conditions.

Environmental exposure controls: Should not reach sewage water or drainage ditch undiluted or unneutralised.

Recommended safety measures for handling the diluted product:

Recommended maximum concentration (%): 0.6

Appropriate engineering controls: No special requirements under normal use conditions.
Appropriate organisational controls: No special requirements under normal use conditions.

Personal protective equipment
Eye / face protection: No special requirements under normal use conditions.
Hand protection: No special requirements under normal use conditions.
Body protection: No special requirements under normal use conditions.
Respiratory protection: No special requirements under normal use conditions.

Environmental exposure controls: No special requirements under normal use conditions.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Method / remark

Physical State: Liquid
Colour: Clear, Pale Yellow
Odour: Chlorine
Odour threshold: Not applicable
pH: ≈ 12.8 (neat)
Melting point/freezing point (°C): Not determined
Initial boiling point and boiling range (°C): Not determined
Flash point (°C): Not applicable.
Sustained combustion: Not applicable.
Evaporation rate: Not determined
Flammability (solid, gas): Not determined
Upper/lower flammability limit (%): Not determined
Vapour pressure: Not determined
Vapour density: Not determined
Relative density: 1.13 g/cm³ (20 °C)
Solubility in / Miscibility with Water: Fully miscible
Autoignition temperature: Not determined
Decomposition temperature: Not applicable.
Viscosity: Not determined
Explosive properties: Not explosive.
Oxidising properties: Not oxidising

9.2 Other information
Surface tension (N/m): Not determined
Corrosion to metals: Corrosive — Weight of evidence

SECTION 10: Stability and reactivity

10.1 Reactivity
No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability
Stable under normal storage and use conditions.

10.3 Possibility of hazardous reactions
No hazardous reactions known under normal storage and use conditions.

10.4 Conditions to avoid
None known under normal storage and use conditions.

10.5 Incompatible materials
Reacts with acids releasing toxic chlorine gas. Keep away from acids.

10.6 Hazardous decomposition products
Chlorine.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Mixture data:.

Relevant calculated ATE(s):
ATE - Oral (mg/kg): >5000

Substance data, where relevant and available, are listed below:.

Acute toxicity
Acute oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
disodium trisilicate	LD_{50}	3400	Rat	Method not given	
potassium hydroxide	LD_{50}	333	Rat	OECD 425	
pentapotassium triphosphate		No data available			
sodium hypochlorite	LD_{50}	> 1100	Rat		90

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
disodium trisilicate	LD_{50}	> 5000	Rat	Method not given	
potassium hydroxide		No data available			
pentapotassium triphosphate		No data available			
sodium hypochlorite	LD_{50}	> 20000	Rabbit	OECD 402 (EU B.3)	

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
disodium trisilicate	LC_{50}	> 2.06	Rat	Method not given	
potassium hydroxide		No data available			
pentapotassium triphosphate		No data available			
sodium hypochlorite	LC_{50}	> 10.5 (vapour)	Rat	OECD 403 (EU B.2)	1

Irritation and corrosivity
Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
disodium trisilicate	Irritant		Method not given	
potassium hydroxide	Corrosive	Rabbit	Draize test	
pentapotassium triphosphate	No data available			
sodium hypochlorite	Corrosive	Rabbit	OECD 404 (EU B.4)	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
disodium trisilicate	Severe damage		Method not given	
potassium hydroxide	Corrosive		Method not given	
pentapotassium triphosphate	No data available			
sodium hypochlorite	Severe damage	Rabbit	OECD 405 (EU B.5)	

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
disodium trisilicate	Irritating to respiratory tract		Method not given	
potassium hydroxide	No data available			
pentapotassium triphosphate	No data available			
sodium hypochlorite	Irritating to respiratory tract			

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
disodium trisilicate	Not sensitising		Method not given	
potassium hydroxide	Not sensitising	Guinea pig	Method not given	
pentapotassium triphosphate	No data available			
sodium hypochlorite	Not sensitising	Guinea pig	OECD 406 (EU B.6) / Buehler test	

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
disodium trisilicate	No data available			
potassium hydroxide	No data available			
pentapotassium triphosphate	No data available			
sodium hypochlorite	No data available			

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Mutagenicity

Ingredient(s)	Result (in-vitro)	Method (in-vitro)	Result (in-vivo)	Method (in-vivo)
disodium trisilicate	No evidence for mutagenicity, negative test results		No data available	
potassium hydroxide	No evidence for mutagenicity, negative test results	Method not given	No data available	
pentapotassium triphosphate	No data available		No data available	
sodium hypochlorite	No evidence for mutagenicity	OECD 471 (EU B.12/13)	No evidence for mutagenicity, negative test results	OECD 474 (EU B.12)

Carcinogenicity

Ingredient(s)	Effect
disodium trisilicate	No evidence for carcinogenicity, negative test results
potassium hydroxide	No evidence for carcinogenicity, negative test results
pentapotassium triphosphate	No data available
sodium hypochlorite	No evidence for carcinogenicity, negative test results

Toxicity for reproduction

Ingredient(s)	Endpoint	Specific effect	Value (mg/kg bw/d)	Species	Method	Exposure time	Remarks and other effects reported
disodium trisilicate			No data available				No evidence for reproductive toxicity
potassium hydroxide			No data available				No evidence for reproductive toxicity
pentapotassium triphosphate			No data available				
sodium hypochlorite	NOAEL	Developmental toxicity Impaired fertility	5 (Cl)	Rat	OECD 414 (EU B.31), oral OECD 415 (EU B.34), oral		No evidence for reproductive toxicity

Repeated dose toxicity

Sub-acute or sub-chronic oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
disodium trisilicate	NOAEL	> 159	Rat	Method not given		
potassium hydroxide		No data available				
pentapotassium triphosphate		No data available				
sodium hypochlorite	NOAEL	50	Rat	OECD 408 (EU B.26)	90	

Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
disodium trisilicate		No data				

		available				
potassium hydroxide		No data available				
pentapotassium triphosphate		No data available				
sodium hypochlorite		No data available				

Sub-chronic inhalation toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
disodium trisilicate		No data available				
potassium hydroxide		No data available				
pentapotassium triphosphate		No data available				
sodium hypochlorite		No data available				

Chronic toxicity

Ingredient(s)	Exposure route	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time	Specific effects and organs affected	Remark
disodium trisilicate			No data available					
potassium hydroxide			No data available					
pentapotassium triphosphate			No data available					
sodium hypochlorite			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
disodium trisilicate	No data available
potassium hydroxide	No data available
pentapotassium triphosphate	No data available
sodium hypochlorite	Not applicable

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
disodium trisilicate	No data available
potassium hydroxide	No data available
pentapotassium triphosphate	No data available
sodium hypochlorite	Not applicable

Aspiration hazard
Substances with an aspiration hazard (H304), if any, are listed in section 3. If relevant, see section 9 for dynamic viscosity and relative density of the product.

Potential adverse health effects and symptoms
Effects and symptoms related to the product, if any, are listed in subsection 4.2.

SECTION 12: Ecological information

12.1 Toxicity

No data is available on the mixture

Substance data, where relevant and available, are listed below:

Aquatic short-term toxicity
Aquatic short-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
disodium trisilicate	LC_{50}	260 - 310	*Oncorhynchus mykiss*	Method not given	96
potassium hydroxide	LC_{50}	80	*Various species*	Method not given	24
pentapotassium triphosphate		No data available			
sodium hypochlorite	LC_{50}	0.06	*Oncorhynchus mykiss*	Method not given	96

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)

disodium trisilicate	EC_{50}	1700	*Daphnia magna Straus*	Method not given	48
potassium hydroxide	EC_{50}	30 - 1000	*Daphnia magna Straus*	Method not given	-
pentapotassium triphosphate		No data available			
sodium hypochlorite	EC_{50}	0.035	*Ceriodaphnia dubia*	OECD 202	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
disodium trisilicate	EC_{50}	207	*Desmodesmus subspicatus*	Method not given	72
potassium hydroxide		No data available			-
pentapotassium triphosphate		No data available			
sodium hypochlorite	NOEC	0.0021	*Not specified*	Method not given	168

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
disodium trisilicate		No data available			-
potassium hydroxide		No data available			-
pentapotassium triphosphate		No data available			
sodium hypochlorite	EC_{50}	0.026	*Crassostrea virginica*	Method not given	2

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
disodium trisilicate		No data available			
potassium hydroxide		No data available			
pentapotassium triphosphate		No data available			
sodium hypochlorite		0.375	*Activated sludge*	Method not given	

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
disodium trisilicate	NOEC	348	*Brachydanio rerio*	Method not given	96 hour(s)	
potassium hydroxide		No data available				
pentapotassium triphosphate		No data available				
sodium hypochlorite	NOEC	0.04	*Menidia pelinsulae*	Method not given	96 hour(s)	

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
disodium trisilicate		No data available				
potassium hydroxide		No data available				
pentapotassium triphosphate		No data available				
sodium hypochlorite		No data available				

Aquatic toxicity to other aquatic benthic organisms, including sediment-dwelling organisms, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw sediment)	Species	Method	Exposure time (days)	Effects observed
disodium trisilicate		No data available			-	
potassium hydroxide		No data available			-	
pentapotassium triphosphate		No data available				
sodium hypochlorite		No data available			-	

Terrestrial toxicity

Terrestrial toxicity - soil invertebrates, including earthworms, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
disodium trisilicate		No data available			-	
potassium hydroxide		No data available			-	
sodium hypochlorite		No data available			-	

Terrestrial toxicity - plants, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
disodium trisilicate		No data available			-	
potassium hydroxide		No data available			-	
sodium hypochlorite		No data available			-	

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
disodium trisilicate		No data available			-	
potassium hydroxide		No data available			-	
sodium hypochlorite		No data available			-	

Terrestrial toxicity - beneficial insects, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
disodium trisilicate		No data available			-	
potassium hydroxide		No data available			-	
sodium hypochlorite		No data available			-	

Terrestrial toxicity - soil bacteria, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
disodium trisilicate		No data available			-	
potassium hydroxide		No data available			-	
sodium hypochlorite		No data available			-	

12.2 Persistence and degradability

Abiotic degradation

Abiotic degradation - photodegradation in air, if available:

Ingredient(s)	Half-life time	Method	Evaluation	Remark
sodium hypochlorite	115 day(s)	Indirect photo-oxidation		

Abiotic degradation - hydrolysis, if available:

Abiotic degradation - other processes, if available:

Biodegradation

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT_{50}	Method	Evaluation
disodium trisilicate					Not applicable (inorganic substance)
potassium hydroxide					Not applicable (inorganic substance)
pentapotassium triphosphate					No data available
sodium hypochlorite					Not applicable (inorganic substance)

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
disodium trisilicate	No data available		Low potential for bioaccumulation	
potassium hydroxide	No data available		Not relevant, does not bioaccumulate	
pentapotassium triphosphate	No data available			
sodium hypochlorite	-3.42	Method not given	No bioaccumulation expected	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
disodium trisilicate	No data available				
potassium hydroxide	No data available				
pentapotassium triphosphate	No data available				
sodium hypochlorite	No data available				

12.4 Mobility in soil

Adsorption/Desorption to soil or sediment

Ingredient(s)	Adsorption coefficient Log Koc	Desorption coefficient Log Koc(des)	Method	Soil/sediment type	Evaluation
disodium trisilicate	No data available				
potassium hydroxide	No data available				Low potential for adsorption to soil
pentapotassium triphosphate	No data available				
sodium hypochlorite	1.12				High potential for mobility in soil

12.5 Other adverse effects

No other adverse effects known.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste from residues / unused products: The concentrated contents or contaminated packaging should be disposed of by a certified handler or according to the site permit. Release of waste to sewers is discouraged. The cleaned packaging material is suitable for energy recovery or recycling in line with local legislation.

Empty packaging
Recommendation: Dispose of observing national or local regulations.
Suitable cleaning agents: Water, if necessary with cleaning agent.

SECTION 14: Transport information

ADG, IMO/IMDG, ICAO/IATA

14.1 UN number: 3266

14.2 UN proper shipping name:
Corrosive liquid, basic, inorganic, n.o.s. (potassium hydroxide , hypochlorite)

14.3 Transport hazard class(es):
Class: 8
Label(s): 8

14.4 Packing group: III

14.5 Environmental hazards:
Environmentally hazardous: No
Marine pollutant: No

14.6 Special precautions for user: None known.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: The product is not transported in bulk tankers.

Other relevant information:
Hazchem code: 2X
The product has been classified, labelled and packaged in accordance with the requirements of ADG and the provisions of the IMDG Code.

Transport regulations include special provisions for certain classes of dangerous goods packed in limited quantities.

SECTION 15: Regulatory information

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

Poison schedule	Classified as a Schedule 5 (S5) Poison using the criteria in the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).
Classification	The product is classified based on criteria of Globally Harmonised System of Classification and Labelling of Chemicals (GHS) as published by Safework Australia.
Inventory listing(s)	AICS (Australian Inventory of Chemical Substances): All components are listed on AICS, or are exempt

SECTION 16: Other information

The information in this document is based on our best present knowledge. However, it does not constitute a guarantee for any specific product features and does not establish a legally binding contract

SDS code: MS31000452 **Version:** 01.0 **Revision:** 2016-01-27

Full text of the H and EUH phrases mentioned in section 3: Full text of the H phrases mentioned in section 3:
- H290 - May be corrosive to metals.
- H302 - Harmful if swallowed.
- H314 - Causes severe skin burns and eye damage.
- H315 - Causes skin irritation.
- H318 - Causes serious eye damage.
- H319 - Causes serious eye irritation.
- H335 - May cause respiratory irritation.
- H400 - Very toxic to aquatic life.
- AUH031 - Contact with acids liberates toxic gas.

Additional information:
Respirators: In general the use of respirators should be limited and engineering controls employed to avoid exposure. If respiratory equipment must be worn ensure correct respirator selection and training is undertaken. Remember that some respirators may be extremely uncomfortable when used for long periods. The use of air powered or air supplied respirators should be considered where prolonged or repeated use is necessary.

Work practices - solvents: Organic solvents may present both a health and flammability hazard. It is recommended that engineering controls should be adopted to reduce exposure where practicable (for example, if using indoors, ensure explosion proof extraction ventilation is available). Flammable or combustible liquids with explosive limits have the potential for ignition from static discharge. Refer to AS 1020 (The control of undesirable static electricity) and AS 1940 (The storage and handling of flammable and combustible liquids) for control procedures.

Exposure standards - Time Weighted Average (TWA) or Workplace Exposure Standard (WES) (NZ): Exposure standards are established on the premise of an 8 hour work period of normal intensity, under normal climatic conditions and where a 16 hour break between shifts exists to enable the body to eliminate absorbed contaminants. In the following circumstances, exposure standards must be reduced: strenuous work conditions; hot, humid climates; high altitude conditions; extended shifts (which increase the exposure period and shorten the period of recuperation).

Personal protective equipment guidelines: The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

Health effects from exposure: It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a Safety Data Sheet which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

Abbreviations and acronyms:
- AISE - The international Association for Soaps, Detergents and Maintenance Products
- ATE - Acute Toxicity Estimate
- LC50 - Lethal Concentration, 50% / Median Lethal Concentration
- DNEL - Derived No Effect Limit
- LD50 - Lethal Dose, 50% / Median Lethal dose
- EUH - CLP Specific hazard statement
- STOT-RE - Specific target organ toxicity (repeated exposure)
- PBT - Persistent, Bioaccumulative and Toxic
- PNEC - Predicted No Effect Concentration
- STOT-SE - Specific target organ toxicity (single exposure)
- EC No. - European Community Number
- REACH number - REACH registration number, without supplier specific part
- vPvB - very Persistent and very Bioaccumulative

End of Safety Data Sheet