

Safety Data Sheet

CLAX ALEGRO 1AL1

Revision: 2018-02-02 Version: 01.0

SECTION 1: Identification of the substance/mixture and supplier

1.1 Product identifier

Product name: CLAX ALEGRO 1AL1

1.2 Recommended use and restrictions on use

Identified uses:

Liquid alkali booster for laundry use

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@diversey.com Website: www.diversey.com/

1.4 Emergency telephone number

Call 1800 033 111 (24hrs)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Skin corrosion, Category 1A Corrosive to metals, Category 1

2.2 Label elements



Signal word: Danger

Hazard statements:

H314 - Causes severe skin burns and eye damage.

H290 - May be corrosive to metals.

Prevention statement(s):

P234 - Keep only in original packaging.

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

SECTION 3: Composition/information on ingredients

3.1 Substances / Mixtures

Ingredient(s)	CAS number	EC number	Weight percent
sodium hydroxide	1310-73-2	215-185-5	10-30
tetrasodium (1-hydroxy ethylidene)bisphosphonate	3794-83-0	223-267-7	1-3

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

* Polymer.

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: No known effects or symptoms in normal use.

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

2R

2 - Fine water spray.

R - Liquid-tight chemical protective clothing and breathing apparatus. Dilute. W - Liquid-tight chemical protective clothing and breathing apparatus. Contain.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

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

Use neutralising agent. Absorb onto dry sand or similar inert material.

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 Diversey. 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 packaging. 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)
sodium hydroxide			2 mg/m ³

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:

Appropriate engineering controls: 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

Body protection:

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.

Wear chemical-resistant clothing and boots in case direct dermal exposure and/or splashes may occur (EN 14605).

Respiratory protection: No special requirements under normal use conditions.

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

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Method / remark

Not relevant to classification of this product

Physical State: Liquid
Colour: Clear, Colourless
Odour: Product specific
Odour threshold: Not applicable

pH: > 12.5 (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.

(UN Manual of Tests and Criteria, section 32, L.2)

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: ≈ 1.33 (20 °C)

Solubility in / Miscibility with Water: Fully miscible

Partition coefficient: n-octanol/water No information available. Substance data, partition coefficient n-octanol/water (log Kow): see subsection 12.3

Substance data, partition coefficient n-octanol/water (log Kow): see su

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.

10.6 Hazardous decomposition products

None known under normal storage and use conditions.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Mixture data:.

Relevant calculated ATE(s):

ATE - Oral (mg/kg): >2000

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

Acute toxicity

Acute oral toxicity

Ingredient(s)	Endpoint	Value	Species	Method	Exposure
		(mg/kg)			time (h)
sodium hydroxide		No data			
·		available			
tetrasodium (1-hydroxy ethylidene)bisphosphonate		No data			
		available			

Acute dermal toxicity

Ingredient(s)	Endpoint	Value	Species	Method	Exposure
		(mg/kg)			time (h)
sodium hydroxide		No data			
		available			
tetrasodium (1-hydroxy ethylidene)bisphosphonate		No data			
		available			

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium hydroxide		No data available			
tetrasodium (1-hydroxy ethylidene)bisphosphonate		No data available			

Irritation and corrosivity Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium hydroxide	Corrosive	Rabbit	Method not given	
tetrasodium (1-hydroxy ethylidene)bisphosphonate	No data available			

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium hydroxide	Corrosive	Rabbit	Method not given	
tetrasodium (1-hydroxy ethylidene)bisphosphonate	No data available			

Respiratory tract irritation and corrosivity

	Ingredient(s)	Result	Species	Method	Exposure time
	sodium hydroxide	No data available			
ĺ	tetrasodium (1-hydroxy ethylidene)bisphosphonate	No data available			

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
sodium hydroxide	Not sensitising		Human repeated patch	
			test	
tetrasodium (1-hydroxy ethylidene)bisphosphonate	No data available			

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
sodium hydroxide	No data available			
tetrasodium (1-hydroxy ethylidene)bisphosphonate	No data available			

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction) Mutagenicity

Ingredient(s)	Result (in-vitro)	Method	Result (in-vivo)	Method
		(in-vitro)		(in-vivo)
sodium hydroxide	No evidence for mutagenicity, negative	DNA repair test	No evidence for mutagenicity, negative	OECD 474 (EU
	test results	on rat	test results	B.12) OECD
		hepatocytes		475 (EU B.11)
		OECD 473		
tetrasodium (1-hydroxy	No data available		No data available	
ethylidene)bisphosphonate				

Carcinogenicity

	Ingredient(s)	Effect
	sodium hydroxide	No evidence for carcinogenicity, weight-of-evidence
Ī	tetrasodium (1-hydroxy ethylidene)bisphosphonate	No data available

Toxicity for reproduction							
Ingredient(s)	Endpoint	Specific effect	Value (mg/kg bw/d)	Species	Method	Exposure time	Remarks and other effects reported
sodium hydroxide			No data available				No evidence for developmental toxicity No evidence for reproductive toxicity
tetrasodium (1-hydroxy ethylidene)bisphosphon ate			No data available				

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
sodium hydroxide		No data available				

tetrasodium (1-hydroxy ethylidene)bisphosphonate	No data		
	available		

Sub-chronic dermal toxicity

	Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Specific effects and organs
			(mg/kg bw/d)			time (days)	affected
	sodium hydroxide		No data				
	•		available				
ſ	tetrasodium (1-hydroxy ethylidene)bisphosphonate		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
sodium hydroxide		No data available				
tetrasodium (1-hydroxy ethylidene)bisphosphonate		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
sodium hydroxide			No data available					
tetrasodium (1-hydroxy ethylidene)bisphosphon ate			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
sodium hydroxide	No data available
tetrasodium (1-hydroxy ethylidene)bisphosphonate	No data available

STOT-repeated exposure

	Ingredient(s)	Affected organ(s)
	sodium hydroxide	No data available
Ī	tetrasodium (1-hydroxy ethylidene)bisphosphonate	No data available

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)
sodium hydroxide	LC 50	35	Various species	Method not given	96
tetrasodium (1-hydroxy ethylidene)bisphosphonate		No data available	.,		

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium hydroxide	EC 50	40.4	Ceriodaphnia	Method not given	48
			sp.		
tetrasodium (1-hydroxy ethylidene)bisphosphonate		No data available			

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium hydroxide	EC 50	22	Photobacteriu m phosphoreum	Method not given	0.25
tetrasodium (1-hydroxy ethylidene)bisphosphonate		No data available			

Aquatic short-term toxicity - marine species Ingredient(s)		Er	ndpoint	Valu		Spec	ies		Method	Exposure
sodium hydroxide				(mg/ No da						time (days)
tetrasodium (1-hydroxy ethylidene)bispho	snhonate			availa No da						
terrasourum († mydroxy emynderi <i>e)</i> pispiro	Sprioriate			availa						
mpact on sewage plants - toxicity to bacteria										
Ingredient(s)		Er	ndpoint	Valu (mg/		Inocu	ılum		Method	Exposure time
sodium hydroxide				No da availa	ata					
tetrasodium (1-hydroxy ethylidene)bispho	sphonate			No da availa	ata					
Amustia lang taun taviaitu				avana	2.0		•			
Aquatic long-term toxicity Aquatic long-term toxicity - fish										
Ingredient(s)	Endpoint	Value (mg/l)	Sp	ecies	Me	thod	Expos		Effects of	observed
sodium hydroxide		No data available								
tetrasodium (1-hydroxy ethylidene)bisphosphonate		No data available								
					l		•			
Aquatic long-term toxicity - crustacea Ingredient(s)	Endpoint	Value (mg/l)	Sp	ecies	Me	thod	Expos		Effects of	observed
sodium hydroxide		No data					Liiii	e		
tetrasodium (1-hydroxy ethylidene)bisphosphonate		available No data available								
			<u> </u>		l					
Aquatic toxicity to other aquatic benthic organisms, inclu Ingredient(s)	Endpoint	t-dwelling orga		available: ecies		thod	Expos	sure	Effects of	observed
(-)		(mg/kg dw					time (c			
		sediment)						iays)		
sodium hydroxide							-	iays)		
sodium hydroxide tetrasodium (1-hydroxy ethylidene)bisphosphonate		sediment) No data					,	idys)		
tetrasodium (1-hydroxy ethylidene)bisphosphonate		No data available No data					,	idys)		
tetrasodium (1-hydroxy ethylidene)bisphosphonate Ferrestrial toxicity Ferrestrial toxicity - soil invertebrates, including earthwole		sediment) No data available No data available					-			
tetrasodium (1-hydroxy ethylidene)bisphosphonate Ferrestrial toxicity	rms, if availabl	sediment) No data available No data available Value (mg/kg dw	Sp	ecies	Me	thod	,	sure	Effects (bbserved
tetrasodium (1-hydroxy ethylidene)bisphosphonate Ferrestrial toxicity Ferrestrial toxicity - soil invertebrates, including earthwole		No data available No data available No data available le: Value (mg/kg dw soil) No data	Sp	ecies	Me	thod	Expo	sure lays)	Effects o	bbserved
tetrasodium (1-hydroxy ethylidene)bisphosphonate Ferrestrial toxicity Ferrestrial toxicity - soil invertebrates, including earthwol Ingredient(s) sodium hydroxide		sediment) No data available No data available e: Value (mg/kg dw soil)	Sp	ecies	Me	thod	Expositime (c	sure lays)	Effects o	observed
tetrasodium (1-hydroxy ethylidene)bisphosphonate Ferrestrial toxicity Ferrestrial toxicity - soil invertebrates, including earthwood Ingredient(s) sodium hydroxide Ferrestrial toxicity - plants, if available:	Endpoint	e: Value (mg/kg dw soil) No data available	, Sp				Exportime (c	sure lays)		
tetrasodium (1-hydroxy ethylidene)bisphosphonate Ferrestrial toxicity Ferrestrial toxicity - soil invertebrates, including earthwol Ingredient(s) sodium hydroxide		e: Value (mg/kg dw soil) No data available Value (mg/kg dw soil) Value (mg/kg dw	Sp	ecies		ethod	Expositime (c	sure lays)		observed observed
tetrasodium (1-hydroxy ethylidene)bisphosphonate Ferrestrial toxicity Ferrestrial toxicity - soil invertebrates, including earthwol Ingredient(s) sodium hydroxide Ferrestrial toxicity - plants, if available:	Endpoint	e: Value (mg/kg dw soil) Value (mg/kg dw soil) Value (mg/kg dw soil) Value (mg/kg dw soil) Value (mg/kg dw	Sp				Expositime (d	sure lays)		
tetrasodium (1-hydroxy ethylidene)bisphosphonate Ferrestrial toxicity Ferrestrial toxicity - soil invertebrates, including earthwork Ingredient(s) sodium hydroxide Ferrestrial toxicity - plants, if available: Ingredient(s) sodium hydroxide	Endpoint	e: Value (mg/kg dw soil) Value (mg/kg dw soil) Value (mg/kg dw soil)	Sp				Expositime (c	sure lays)		
tetrasodium (1-hydroxy ethylidene)bisphosphonate Ferrestrial toxicity errestrial toxicity - soil invertebrates, including earthwol Ingredient(s) sodium hydroxide Ferrestrial toxicity - plants, if available: Ingredient(s) sodium hydroxide	Endpoint	e: Value (mg/kg dw soil) Value (mg/kg dw soil) Value (mg/kg dw soil) Value (mg/kg dw soil) Value (mg/kg dw	Sp, Sp		Me		Exportime (c	sure lays)	Effects o	
tetrasodium (1-hydroxy ethylidene)bisphosphonate Ferrestrial toxicity Ferrestrial toxicity - soil invertebrates, including earthworking lingredient(s) sodium hydroxide Ferrestrial toxicity - plants, if available: Ingredient(s) sodium hydroxide Ferrestrial toxicity - birds, if available:	Endpoint	e: Value (mg/kg dw soil) No data available Value (mg/kg dw soil) Value (mg/kg dw soil) Value (mg/kg dw soil) No data available Value No data	Sp, Sp	ecies	Me	thod	Expositime (d	sure lays)	Effects o	observed
tetrasodium (1-hydroxy ethylidene)bisphosphonate Ferrestrial toxicity Ferrestrial toxicity - soil invertebrates, including earthwork Ingredient(s) sodium hydroxide Ferrestrial toxicity - plants, if available: Ingredient(s) sodium hydroxide Ferrestrial toxicity - birds, if available: Ingredient(s)	Endpoint	e: Value (mg/kg dw soil) No data available Value (mg/kg dw soil) No data available Value (mg/kg dw soil) Value (mg/kg dw soil) Value (mg/kg dw soil) Value (mg/kg dw soil) Value	Sp, Sp	ecies	Me	thod	Exportime (c	sure lays)	Effects o	observed
tetrasodium (1-hydroxy ethylidene)bisphosphonate Ferrestrial toxicity Ferrestrial toxicity - soil invertebrates, including earthwood ingredient(s) Sodium hydroxide Ferrestrial toxicity - plants, if available: Ingredient(s) Sodium hydroxide Ferrestrial toxicity - birds, if available: Ingredient(s) Sodium hydroxide Ferrestrial toxicity - birds, if available: Ingredient(s) Sodium hydroxide	Endpoint Endpoint Endpoint	sediment) No data available No data available Value (mg/kg dw soil) No data available Value (mg/kg dw soil) No data available Value (mg/kg dw soil) No data available	, Sp	ecies	Me	thod	Exportime (d	sure lays) sure lays)	Effects of	observed observed
tetrasodium (1-hydroxy ethylidene)bisphosphonate Terrestrial toxicity Terrestrial toxicity - soil invertebrates, including earthwork Ingredient(s) sodium hydroxide Terrestrial toxicity - plants, if available: Ingredient(s) sodium hydroxide Terrestrial toxicity - birds, if available: Ingredient(s)	Endpoint	e: Value (mg/kg dw soil) No data available Value (mg/kg dw soil) Value (mg/kg dw soil) Value (mg/kg dw soil) No data available Value No data	Sp Sp	ecies	Me	thod	Exportime (c	sure lays)	Effects of	observed

Terrestrial toxicity - soil bacteria, if available:						
Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
sodium hydroxide		No data available			-	

No data available

12.2 Persistence and degradability Abiotic degradation

sodium hydroxide

Abiotic degradation - photodegradation in air, if available:

Ingredient(s)	Half-life time	Method	Evaluation	Remark
sodium hydroxide	sodium hydroxide 13 second(s)		Rapidly photodegradable	

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
sodium hydroxide					Not applicable (inorganic substance)
tetrasodium (1-hydroxy ethylidene)bisphosphonate					No data available

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)

artition coomeion in cotano, water (leg i				
Ingredient(s)	Value	Method	Evaluation	Remark
sodium hydroxide	No data available		Not relevant, does not bioaccumulate	
tetrasodium (1-hydroxy ethylidene)bisphosphonate	No data available			

Bioconcentration factor (BCF)

bioconcentration factor (BCT)								
Ingredient(s)	Value	Species	Method	Evaluation	Remark			
sodium hydroxide	No data available							
tetrasodium (1-hydroxy	No data available							
ethylidene)bisphosphon								
ate								

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
sodium hydroxide	No data available				Mobile in soil
tetrasodium (1-hydroxy ethylidene)bisphosphonate	No data available				

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: 1824

14.2 UN proper shipping name: Sodium hydroxide solution

14.3 Transport hazard class(es):

Class: 8 Label(s): 8 14.4 Packing group: II

14.5 Environmental hazards:

14.6 Special precautions for user: None known.

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

Other relevant information:

Hazchem code: 2R

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

National regulations Globally Harmonised System of Classification and Labelling of Chemicals (GHS) as published by

Safework Australia.

Poison schedule Classified as a Schedule 6 (S6) Poison using the criteria in the Standard for the Uniform Scheduling

of Medicines and Poisons (SUSMP).

Classification Globally Harmonised System of Classification and Labelling of Chemicals (GHS) as published by

Safework Australia.

AICS (Australian Inventory of Chemical Substances): All components are listed on AICS, or are Inventory listing(s)

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: MS31000049 Version: 01.0 Revision: 2018-02-02

Full text of the H phrases mentioned in section 3:

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:

- ATE Acute Toxicity Estimate
 LC50 Lethal Concentration, 50% / Median Lethal Concentration
- · LD50 Lethal Dose, 50% / Median Lethal dose
- STOT-RE Specific target organ toxicity (repeated exposure)
- STOT-SE Specific target organ toxicity (single exposure)
- EC No. European Community Number

End of Safety Data Sheet