

Safety Data Sheet

Divosan TC86 VS8

Revision: 2018-02-02 **Version:** 01.0

SECTION 1: Identification of the substance/mixture and supplier

1.1 Product identifier

Product name: Divosan TC86 VS8

1.2 Recommended use and restrictions on use

Identified uses:

Chlorinated detergent/sanitiser for hard water.

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

AUH031

Skin corrosion, Category 1A Corrosive to the respiratory tract, AUH071 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.

AUH071 - Corrosive to the respiratory tract.

H290 - May be corrosive to metals.

Prevention statement(s):

P234 - Keep only in original packaging.

P260 - Do not breathe vapours or spray.

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.

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
sodium hypochlorite	7681-52-9	231-668-3	3-10
2-phosphonobutane-1,2,4-tricarboxylic acid	37971-36-1	253-733-5	-

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. Immediately call a POISON

CENTRE, doctor or physician.

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 POISÓN 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: Corrosive to the respiratory tract. 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

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

Ensure adequate ventilation. Do not breathe dust or vapour. 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.

6.3 Methods and material for containment and cleaning up

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

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 to prevent aerosol and dust generation:

Avoid formation of aerosol.

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. Do not breathe vapours or spray. 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 $\underline{\textit{undiluted}}$ product:

Appropriate engineering controls: Use only in well ventilated areas. The product is intended to be used in closed systems. 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 (EN 14605).

Respiratory protection: If exposure to liquid particles or splashes cannot be avoided use: half mask (EN 140) with particle

filter P2 (EN 143) or full-face mask (EN 136) with particle filter P1 (EN 143) Consider specific local use conditions. In consultation with the supplier of respiratory protection equipment a different type providing similar protection may be chosen. Specific applications tools may be available to limit

exposure. Please refer to the product information sheet for the possibilities.

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

Not relevant to classification of this product

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

pH: > 12 (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: ≈ 1.20 (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

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

Contact with acids liberates toxic gas. Reacts with acids. Keep away from acids.

10.6 Hazardous decomposition products

None known under normal storage and use conditions.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

No data is available on the mixture.

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)
sodium hydroxide		No data available			
sodium hypochlorite	LD 50	> 1100	Rat		90
2-phosphonobutane-1,2,4-tricarboxylic acid	LD 50	> 2000	Rat	Read across OECD 401 (EU B.1) Substance was tested as 25-50 % aqueous solution	

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
sodium hydroxide		No data available			
sodium hypochlorite	LD 50	> 20000	Rabbit	OECD 402 (EU B.3)	
2-phosphonobutane-1,2,4-tricarboxylic acid	LD 50	> 2000	Rat	Read across OECD 402 (EU B.3) Substance was tested as 25-50 % aqueous solution	

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium hydroxide		No data available			
sodium hypochlorite	LC 50	> 10.5 (vapour)	Rat	OECD 403 (EU B.2)	1
2-phosphonobutane-1,2,4-tricarboxylic acid	LC 50	> 1979 No mortality observed	Rat	OECD 403 (EU B.2)	4

Irritation and corrosivity Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium hydroxide	Corrosive	Rabbit	Method not given	
sodium hypochlorite	Corrosive	Rabbit	OECD 404 (EU B.4)	
2-phosphonobutane-1,2,4-tricarboxylic acid	Not irritant		OECD 404 (EU B.4)	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium hydroxide	Corrosive	Rabbit	Method not given	
sodium hypochlorite	Severe damage	Rabbit	OECD 405 (EU B.5)	
2-phosphonobutane-1,2,4-tricarboxylic acid	Irritant	Rabbit	OECD 405 (EU B.5)	24 hour(s)

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium hydroxide	No data available			
sodium hypochlorite	Irritating to			
	respiratory tract			
2-phosphonobutane-1,2,4-tricarboxylic acid	No data available			

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
sodium hydroxide	Not sensitising		Human repeated patch	
			test	
sodium hypochlorite	Not sensitising	Guinea pig	OECD 406 (EU B.6) /	
			Buehler test	
2-phosphonobutane-1,2,4-tricarboxylic acid	Not sensitising		Method not given	

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
sodium hydroxide	No data available			
sodium hypochlorite	No data available			
2-phosphonobutane-1,2,4-tricarboxylic acid	No data available			

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction) $\underline{\text{Mutagenicity}}$

Ingredient(s)	Result (in-vitro)	Method (in-vitro)	Result (in-vivo)	Method (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		
sodium hypochlorite	No evidence for mutagenicity	OECD 471 (EU	No evidence for mutagenicity, negative	OECD 474 (EU
		B.12/13)	test results	B.12)
2-phosphonobutane-1,2,4-tricarboxylic acid	No evidence for mutagenicity, negative	OECD 471 (EU	No evidence for mutagenicity, negative	Method not
	test results	B.12/13) OECD	test results	given
		473		

Carcinogenicity

Ingredient(s)	Effect
sodium hydroxide	No evidence for carcinogenicity, weight-of-evidence
sodium hypochlorite	No evidence for carcinogenicity, negative test results
2-phosphonobutane-1,2,4-tricarboxylic acid	No evidence for carcinogenicity, weight-of-evidence

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
sodium hypochlorite	NOAEL	Developmental toxicity Impaired fertility	5 (CI)	Rat	OECD 414 (EU B.31), oral OECD 415 (EU B.34), oral		No evidence for reproductive toxicity
2-phosphonobutane-1, 2,4-tricarboxylic acid			No data available				No evidence for teratogenic effects

Repeated dose toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
sodium hydroxide		No data available				
sodium hypochlorite	NOAEL	50	Rat	OECD 408 (EU B.26)	90	
2-phosphonobutane-1,2,4-tricarboxylic acid		-				No adverse effects observed

Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
sodium hydroxide		No data				
		available				
sodium hypochlorite		No data				
		available				
2-phosphonobutane-1,2,4-tricarboxylic acid		No data				
		available				

Sub-chronic inhalation toxicity

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- 1	Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Specific effects and organs
			(mg/kg bw/d)			time (days)	affected
	sodium hydroxide		No data				
			available				
ſ	sodium hypochlorite		No data				
			available				
Ī	2-phosphonobutane-1,2,4-tricarboxylic acid		No data				
			available				

Childric toxicity								
Ingredient(s)	Exposure	Endpoint	Value	Species	Method	Exposure	Specific effects and	Remark
	route		(mg/kg bw/d)	,		time	organs affected	
sodium hydroxide			No data					
-			available					
sodium hypochlorite			No data					
			available					
2-phosphonobutane-1,			No data					
2.4-tricarboxylic acid			available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
sodium hydroxide	No data available
sodium hypochlorite	Not applicable
2-phosphonobutane-1,2,4-tricarboxylic acid	Not applicable

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
sodium hydroxide	No data available
sodium hypochlorite	Not applicable
2-phosphonobutane-1,2,4-tricarboxylic acid	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)
sodium hydroxide	LC 50	35	Various species	Method not given	96
sodium hypochlorite	LC 50	0.06	Oncorhynchus mykiss	Method not given	96
2-phosphonobutane-1,2,4-tricarboxylic acid	LC 50	> 500	Leuciscus idus	Method not given	48

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.		
sodium hypochlorite	EC 50	0.035	Ceriodaphnia	OECD 202 (EU C.2)	48
			dubia		
2-phosphonobutane-1,2,4-tricarboxylic acid	EC 50	265	Daphnia	Method not given	24
	1		magna Straus		

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium hydroxide	EC 50	22	Photobacteriu	Method not given	0.25
			m		
			phosphoreum		
sodium hypochlorite	NOEC	0.0021	Not specified	Method not given	168
2-phosphonobutane-1,2,4-tricarboxylic acid	EC 50	140	Desmodesmus	Method not given	72
			subspicatus		

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
sodium hydroxide		No data available			-
sodium hypochlorite	EC 50	0.026	Crassostrea virginica	Method not given	2
2-phosphonobutane-1,2,4-tricarboxylic acid		No data available			-

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
sodium hydroxide		No data available			
sodium hypochlorite		0.375	Activated sludge	Method not given	
2-phosphonobutane-1,2,4-tricarboxylic acid	EC 10	> 1000	Bacteria	OECD 209	3 hour(s)

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
sodium hydroxide		No data available				
sodium hypochlorite	NOEC	0.04	Menidia pelinsulae	Method not given	96 hour(s)	

2-phosphonobutane-1.2.4-tricarboxylic acid	NOEC	>= 1042	Brachvdanio	OECD 203	14 day(s)	
z priosprioriosatario 1,2,1 triodison/jilo dola		0.2	,	020220	day(0)	
			rerio			

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Effects observed
		(mg/l)			time	
sodium hydroxide		No data				
		available				
sodium hypochlorite		No data				
		available				
2-phosphonobutane-1,2,4-tricarboxylic acid	EC 50	> 1071	Daphnia	OECD 202	21 day(s)	
			magna		1	

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
	sodium hydroxide		No data			-	
			available				
	sodium hypochlorite		No data			-	
			available				
Γ	2-phosphonobutane-1,2,4-tricarboxylic acid		No data			-	
			available				

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

Terrestrial toxicity Son invertebrates, including earthwen	113, II availabi	<u>. </u>				
Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Effects observed
		(mg/kg dw			time (days)	
		soil)				
sodium hydroxide		No data			-	
		available				
sodium hypochlorite		No data			-	
		available				
2-phosphonobutane-1,2,4-tricarboxylic acid		No data			-	
		available				!

Terrestrial toxicity - plants, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
sodium hydroxide		No data available			-	
sodium hypochlorite		No data available			-	
2-phosphonobutane-1,2,4-tricarboxylic acid		No data available			-	

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
sodium hydroxide		No data available			-	
sodium hypochlorite		No data available			-	
2-phosphonobutane-1,2,4-tricarboxylic acid		No data available			-	

Terrestrial toxicity - beneficial insects, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
sodium hydroxide		No data			-	
		available				
sodium hypochlorite		No data			-	
		available				
2-phosphonobutane-1,2,4-tricarboxylic acid		No data			-	
		available				

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			-	
sodium hypochlorite		No data available			-	
2-phosphonobutane-1,2,4-tricarboxylic acid		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 hydroxide	13 second(s)	Method not given	Rapidly photodegradable	
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
sodium hydroxide					Not applicable (inorganic substance)
sodium hypochlorite					Not applicable (inorganic substance)
2-phosphonobutane-1,2,4-tricarboxylic acid		Oxygen depletion	0 % in 28 day(s)	OECD 301E	Not readily biodegradable.

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

12.3 Bioaccumulative potential

Ingredient(s)	Value	Method	Evaluation	Remark
				Remark
sodium hydroxide	No data available		Not relevant, does not	
			bioaccumulate	
sodium hypochlorite	-3.42	Method not given	No bioaccumulation expected	
2-phosphonobutane-1,2,4-tricarboxylic	-1.36	Method not given	No bioaccumulation expected	
acid				

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
sodium hydroxide	No data available				
sodium hypochlorite	No data available				
2-phosphonobutane-1,	No data available				
2,4-tricarboxylic acid					

12.4 Mobility in soil

Ingredient(s)	Adsorption coefficient Log Koc	Desorption coefficient Log Koc(des)	Method	Soil/sediment type	Evaluation
sodium hydroxide	No data available				Mobile in soil
sodium hypochlorite	1.12				High potential for mobility in soil
2-phosphonobutane-1,2,4-tricarboxylic acid	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.

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):

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

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: MS31000165 **Version:** 01.0 **Revision:** 2018-02-02

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