



Powergel

Revision: 2022-12-21

Version: 01.1

SECTION 1: Identification of the substance/mixture and supplier

1.1 Product identifier

Product name: Powergel

1.2 Recommended use and restrictions on use

Identified uses:

Caustic gel cleaner

Restrictions of use:

Uses other than those identified are not recommended

1.3 Details of the supplier

Diversey Australia Pty. Limited

Unit 8, 55 Newton Road, Wetherill Park, NSW, 2164

1-7 Bell Grove, Braeside, VIC 3195

Telephone: 1800 647 779 (toll free)

Email: aucustserv@diversey.com

Website: diversey.com.au

1.4 Emergency telephone number

Seek medical advice (show the label or safety data sheet where possible)

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

Serious eye damage, 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.

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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#	EC number	Weight percent
sodium hydroxide	1310-73-2	215-185-5	10-30
alcohols, C12-14, ethoxylated, sulphates, sodium salts	68891-38-3	500-234-8	3-10
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	61791-46-6	263-179-6	3-10
dodecan-1-ol	112-53-8	203-982-0	0.1-1

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

[4] 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 reuse. 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.

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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

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 advised 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**Eye / face protection:**

Safety glasses or goggles (AS/NZS 1337.1). 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 (AS/NZS 2161.10). 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

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Body protection:	In consultation with the supplier of protective gloves a different type providing similar protection may be chosen.
Respiratory protection:	Wear chemical-resistant clothing and boots in case direct dermal exposure and/or splashes may occur (EN 14605). 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
Physical state: Liquid	
Colour: Clear , Light , from Yellow to Amber	
Odour: Product specific	
Odour threshold: Not applicable	
pH:	
Dilution pH: > 12 (1%)	
Melting point/freezing point (°C): Not determined	Not relevant to classification of this product
Initial boiling point and boiling range (°C): Not determined	

Flammability (liquid): 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	
Lower and upper explosion limit/flammability limit (%): Not determined	
Vapour pressure: Not determined	
Relative vapour density: Not determined	Not relevant to classification of this product
Relative density: ≈ 1.23 (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

None known under normal use conditions.

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): >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)
sodium hydroxide		No data available			
alcohols, C12-14, ethoxylated, sulphates, sodium salts	LD ₅₀	> 2000	Rat	OECD 401 (EU B.1)	
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	LD ₅₀	> 2000	Rat	Read across	
dodecan-1-ol	LD ₅₀	> 2000	Rat	OECD 401 (EU B.1)	

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
sodium hydroxide	LD ₅₀	1350	Rabbit	Method not given	
alcohols, C12-14, ethoxylated, sulphates, sodium salts	LD ₅₀	> 2000	Rat	OECD 402 (EU B.3)	
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	LD ₅₀	> 2000	Rat	Read across	
dodecan-1-ol	LD ₅₀	> 5000	Rabbit	EPA OPPTS 870.1200	24

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium hydroxide		No data available			
alcohols, C12-14, ethoxylated, sulphates, sodium salts		5.71			
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides		No data available			
dodecan-1-ol	LC ₅₀	0.7	Rat		6

Irritation and corrosivity

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium hydroxide	Corrosive	Rabbit	Method not given	
alcohols, C12-14, ethoxylated, sulphates, sodium salts	Irritant	Rabbit	OECD 404 (EU B.4)	
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	Not irritant			
dodecan-1-ol	No data available			

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium hydroxide	Corrosive	Rabbit	Method not given	
alcohols, C12-14, ethoxylated, sulphates, sodium salts	Severe damage	Rabbit	OECD 405 (EU B.5)	
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	Severe damage	Rabbit	OECD 405 (EU B.5) Read across	
dodecan-1-ol	No data available			

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium hydroxide	No data available			
alcohols, C12-14, ethoxylated, sulphates, sodium salts	No data available			
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	No data available			
dodecan-1-ol	No data available			

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)

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sodium hydroxide	Not sensitising		Human repeated patch test
alcohols, C12-14, ethoxylated, sulphates, sodium salts	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	Not sensitising	Guinea pig	OECD 406 (EU B.6) / Buehler test Read across
dodecan-1-ol	No data available		

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
sodium hydroxide	No data available			
alcohols, C12-14, ethoxylated, sulphates, sodium salts	No data available			
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	No data available			
dodecan-1-ol	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)
sodium hydroxide	No evidence for mutagenicity, negative test results	DNA repair test on rat hepatocytes OECD 473	No evidence for mutagenicity, negative test results	OECD 474 (EU B.12) OECD 475 (EU B.11)
alcohols, C12-14, ethoxylated, sulphates, sodium salts	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13) OECD 476	No evidence for mutagenicity, negative test results	OECD 475 (EU B.11)
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13) Read across	No evidence of genotoxicity, negative test results	OECD 475 (EU B.11) OECD 478 Read across
dodecan-1-ol	No data available		No data available	

Carcinogenicity

Ingredient(s)	Effect
sodium hydroxide	No evidence for carcinogenicity, weight-of-evidence
alcohols, C12-14, ethoxylated, sulphates, sodium salts	No evidence for carcinogenicity, weight-of-evidence
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	No evidence for carcinogenicity, negative test results
dodecan-1-ol	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
alcohols, C12-14, ethoxylated, sulphates, sodium salts	NOAEL	Developmental toxicity	> 1000	Rat	OECD 414 (EU B.31), oral		No evidence for reproductive toxicity
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	NOAEL	Developmental toxicity Teratogenic effects	25	Rat	Read across		No evidence for developmental toxicity
dodecan-1-ol			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				
alcohols, C12-14, ethoxylated, sulphates, sodium salts	NOAEL	> 225		OECD 408 (EU B.26)	90	
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides		No data available				
dodecan-1-ol		No data available				

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				
alcohols, C12-14, ethoxylated, sulphates, sodium salts		No data available				

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ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides		No data available				
dodecan-1-ol		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				
alcohols, C12-14, ethoxylated, sulphates, sodium salts		No data available				
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides		No data available				
dodecan-1-ol		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					
alcohols, C12-14, ethoxylated, sulphates, sodium salts			No data available					
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides			No data available					
dodecan-1-ol			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
sodium hydroxide	No data available
alcohols, C12-14, ethoxylated, sulphates, sodium salts	No data available
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	Not applicable
dodecan-1-ol	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
sodium hydroxide	No data available
alcohols, C12-14, ethoxylated, sulphates, sodium salts	No data available
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	Not applicable
dodecan-1-ol	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	<i>Various species</i>	Method not given	96
alcohols, C12-14, ethoxylated, sulphates, sodium salts	LC ₅₀	7.1	<i>Fish</i>	OECD 203 (EU C.1)	96
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	LC ₅₀	> 0.1 - 1	<i>Brachydanio rerio</i>	OECD 203 (EU C.1)	96
dodecan-1-ol	LC ₅₀	1.01	<i>Pimephales promelas</i>		96

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Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium hydroxide	EC ₅₀	40.4	<i>Ceriodaphnia sp.</i>	Method not given	48
alcohols, C12-14, ethoxylated, sulphates, sodium salts	EC ₅₀	7.4	<i>Daphnia magna Straus</i>	OECD 202 (EU C.2)	48
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	EC ₅₀	0.082	<i>Daphnia magna Straus</i>	OECD 202, static	48
dodecan-1-ol	LC ₅₀	0.765	<i>Daphnia magna Straus</i>	OECD 202, static	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium hydroxide	EC ₅₀	22	<i>Photobacterium phosphoreum</i>	Method not given	0.25
alcohols, C12-14, ethoxylated, sulphates, sodium salts	EC ₅₀	10 - 100	<i>Pseudokirchneriella subcapitata</i>	OECD 201 (EU C.3)	72
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	E _r C ₅₀	0.1-1	<i>Pseudokirchneriella subcapitata</i>	OECD 201 (EU C.3)	72
dodecan-1-ol	E _r C ₅₀	No data available	<i>Desmodesmus subspicatus</i>	OECD 201, static	72

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
sodium hydroxide		No data available			
alcohols, C12-14, ethoxylated, sulphates, sodium salts		No data available			
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides		No data available			
dodecan-1-ol		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			
alcohols, C12-14, ethoxylated, sulphates, sodium salts	EC ₀	> 100		DIN 38412, Part 27	
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	EC ₁₀	24	<i>Pseudomonas putida</i>	Read across	18 hour(s)
dodecan-1-ol		No data available			

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				
alcohols, C12-14, ethoxylated, sulphates, sodium salts	NOEC	1 - 10	<i>Not specified</i>	OECD 203	45 day(s)	
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	NOEC	0.42	<i>Pimephales promelas</i>	Read across		
dodecan-1-ol		No data available				

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
sodium hydroxide		No data available				
alcohols, C12-14, ethoxylated, sulphates, sodium salts	NOEC	0.27	<i>Daphnia sp.</i>	OECD 211	21 day(s)	
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	NOEC	< 0.1	<i>Daphnia magna</i>	OECD 211	21 day(s)	
dodecan-1-ol		No data available				

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

Ingredient(s)	Endpoint	Value (mg/kg dw)	Species	Method	Exposure time (days)	Effects observed
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Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
sodium hydroxide		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
sodium hydroxide		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				

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
sodium hydroxide		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				

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				

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	

Abiotic degradation - hydrolysis, if available:

Ingredient(s)	Half-life time in fresh water	Method	Evaluation	Remark
sodium hydroxide	No data available			

Abiotic degradation - other processes, if available:

Ingredient(s)	Type	Half-life time	Method	Evaluation	Remark
sodium hydroxide		No data available			

Biodegradation

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT ₅₀	Method	Evaluation
sodium hydroxide					Not applicable (inorganic substance)
alcohols, C12-14, ethoxylated, sulphates, sodium salts		CO ₂ production	77-79 % in 28 day(s)	OECD 301D	Readily biodegradable
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides		Oxygen depletion	> 60%	OECD 301D	Readily biodegradable
dodecan-1-ol	Activated sludge, aerobe	CO ₂ production	82.2% in 28 day(s)	Read across	Readily biodegradable

Ready biodegradability - anaerobic and marine conditions, if available:

Ingredient(s)	Medium & Type	Analytical method	DT ₅₀	Method	Evaluation
sodium hydroxide					No data available

Degradation in relevant environmental compartments, if available:

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Ingredient(s)	Medium & Type	Analytical method	DT ₅₀	Method	Evaluation
sodium hydroxide					No data available

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
sodium hydroxide	No data available		Not relevant, does not bioaccumulate	
alcohols, C12-14, ethoxylated, sulphates, sodium salts	0.3	Method not given	No bioaccumulation expected	
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	No data available		No bioaccumulation expected	
dodecan-1-ol	No data available			

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
sodium hydroxide	No data available				
alcohols, C12-14, ethoxylated, sulphates, sodium salts	< 3		Method not given	No bioaccumulation expected	
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	-			Not relevant, does not bioaccumulate	
dodecan-1-ol	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
sodium hydroxide	No data available				Mobile in soil
alcohols, C12-14, ethoxylated, sulphates, sodium salts	No data available				
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	No data available				
dodecan-1-ol	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):

Transport hazard class (and subsidiary risks): 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.

Powergel

Other relevant information:**Hazchem code:** 2R**IMO/IMDG****EmS:** F-A, S-B

The product has been classified, labelled and packaged in accordance with the requirements of ADG7.7 Code 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)	Australian Inventory of Industrial Chemicals: All components are listed on the inventory, 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: MS31000313**Version:** 01.1**Revision:** 2022-12-21**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