

Safety Data Sheet

SUMA ULTRA L2

Revision: 2018-11-19 **Version:** 01.0

SECTION 1: Identification of the substance/mixture and supplier

1.1 Product identifier

Product name: SUMA ULTRA L2

1.2 Recommended use and restrictions on use

Identified uses: Warewashing detergent Restrictions of use:

Uses other than those identified are not recommended

1.3 Details of the supplier

DIVERSEY NEW ZEALAND LTD.

24 Bancroft Crescent, Glendene, Auckland, 0602, New Zealand

Telephone: +64 9 813 9800; 0800 803 615 (toll free)

Fax: + 64 9 813 9801 Website: www.diversey.com

1.4 Emergency telephone number

Call 0800 243 622 (24 hrs)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

HSNO Classification

6.1D - Acutely toxic (oral)

8.1A - Corrosive to metals

8.2B - Corrosive to dermal tissue

8.3A - Corrosive to ocular tissue

GHS Equivalent Classification

Acute toxicity, oral, Category 4 Corrosive to metals, Category 1 Skin corrosion, Category 1B

2.2 Label elements



Signal word: Danger Hazard statements:

H314 - Causes severe skin burns and eye damage.

H302 - Harmful if swallowed.

H290 - May be corrosive to metals.

Prevention statement(s):

P233 - Keep container tightly closed.

P234 - Keep only in original packaging.

P264 - Wash face, hands and any exposed skin thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

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.

P301 + P312 - IF SWALLOWED: Call a POISON CENTRE, doctor or physician if you feel unwell.

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).

P330 - Rinse mouth.

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 (%): 0.4

HSNO Classification

6.3B - Mildly irritating to the skin

GHS Equivalent Classification

Skin irritation, Category 3

2.5 Label elements diluted product

H316 - Causes mild skin irritation.

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

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

Workplace exposure limit(s), if available, are listed in subsection 8.1.

SECTION 4: First aid measures

4.1 Description of first aid measures

Symptoms of intoxication may even occur after several hours. It is recommended to continue **General Information:**

medical observation for at least 48 hours after the incident. If unconscious place in recovery position and seek medical advice. Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. No mouth-to-mouth or mouth-to-nose resuscitation. Use Ambu bag or ventilator.

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

Skin contact: Take off immediately all contaminated clothing and wash it before re-use. Immediately call a

POISON CENTRE, doctor or physician.

Eye contact: Hold eyelids apart and flush eyes with plenty of lukewarm water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE,

doctor or physician.

Rinse mouth. Immediately drink 1 glass of water. Never give anything by mouth to an unconscious Ingestion:

person. Do NOT induce vomiting. Keep at rest. Immediately call a POISON CENTRE, doctor or

physician. Get medical attention or advice if you feel unwell.

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.

Causes severe or permanent damage. Eve contact:

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 0800 764 766 (0800 POISON)

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.

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. Avoid contact with skin and eyes. Do not eat, drink or smoke when using this product. Use only with adequate ventilation. See chapter 8.2, Exposure controls / Personal protection.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local and national regulations. Store in a closed container. Keep only in original packaging.

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:

ali ilitik values, ii avallable.			
Ingredient(s)	Long term value(s)	Short term value(s)	Ceiling 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:

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.

Avoid direct contact and/or splashes where possible. Train personnel

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

oe chosen

Body protection: 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.

Recommended safety measures for handling the diluted product:

Recommended maximum concentration (%): 0.4

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

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

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

ISO 4316

ISO 4316

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

pH: ≈ 13.5 (neat)

Dilution pH: ≥ 12 (1%)

Melting point/freezing point (°C): Not determined

Initial boiling point and boiling range (°C): Not determined

Flammability (liquid): Not flammable. 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 applicable to liquids

Upper/lower flammability limit (%): Not determined

Vapour pressure: Not determined Vapour density: Not determined Relative density: ≈ 1.264 (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. Not relevant to classification of this product

Not relevant to classification of this product

Not relevant to classification of this product

OECD 109 (EU A.3)

Viscosity: ≈ 15 mPa.s (20 °C) 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 - Dermal (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			

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
sodium hydroxide	LD 50	1350	Rabbit	Method not given	

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium hydroxide		No data available			

Irritation and corrosivity

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium hydroxide	Corrosive	Rabbit	Method not given	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium hydroxide	Corrosive	Rabbit	Method not given	

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium hydroxide	No data available			

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
sodium hydroxide	Not sensitising		Human repeated patch	
			test	

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
sodium hydroxide	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		

Carcinogenicity

ĺ	Ingredient(s)	Effect
ĺ	sodium hydroxide	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				No evidence for developmental
•			available				toxicity No evidence for
							reproductive toxicity

Repeated dose toxicity
Sub-acute or sub-chronic oral toxicity

Cub acute of cub efficience or at textority						
Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
sodium hydroxide		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				

Sub-chronic inhalation toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Exposure time (days)	Specific effects and organs affected
		(ilig/kg bw/a)		unie (uays)	anecteu
sodium hydroxide		No data			
		available			l l

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					

STOT-single exposure

Ingredient(s)	Affected organ(s)
sodium hydroxide	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
sodium hydroxide	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	Species	Method	Exposure
3		(mg/l)			time (h)
sodium hydroxide	LC 50	35	Various	Method not given	96
·			species	-	

Aquatic short-term toxicity - crustacea					
Ingredient(s)	Endpoint	Value	Species	Method	Exposure
		(mg/l)			time (h)
sodium hydroxide	EC 50	40.4	Ceriodaphnia	Method not given	48

A	quatic short-term toxicity - algae					
	Ingredient(s)	Endpoint	Value	Species	Method	Exposure
			(mg/l)			time (h)
	sodium hydroxide	EC 50	22	Photobacteriu	Method not given	0.25
				m		

Aquatic short-term toxicity - marine species					
Ingredient(s)	Endpoint	Value	Species	Method	Exposure
•		(mg/l)	·		time (days)
sodium hydroxide		No data			-
·		available			

Impact on sewage plants - toxicity to bacteria					
Ingredient(s)	Endpoint	Value	Inoculum	Method	Exposure
		(mg/l)			time
sodium hydroxide		No data		1	
·		available		i	

Aquatic long-term toxicity

Aquatic	long-term	toxicity	- fish	
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Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
sodium hydroxide		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				

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				

Terrestrial toxicity

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

Terrestrial toxicity - soil invertebrates, including earthworms, if available.							
	Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Effects observed
			(mg/kg dw			time (days)	
			soil)				
	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:

remodrial terriority beneficial interest, in 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:

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)

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
sodium hydroxide	No data available		Not relevant, does not	
			bioaccumulate	

Bioconcentration factor (BCF)

ĺ	Ingredient(s)	Value	Species	Method	Evaluation	Remark
	sodium hydroxide	No data available				

12.4 Mobility in soil

Adsorption/Desorption to soil or sediment

Adsorption/Desorption to soil or sealment								
	Ingredient(s)	Adsorption coefficient Log Koc	Desorption coefficient Log Koc(des)	Method	Soil/sediment type	Evaluation		
		Log Noc	Log Noc(ues)					
	sodium hydroxide	No data available				Mobile 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.

material is suitable for energy recovery or recycling in line with local registation.

Empty packaging

Recommendation: Dispose of observing national or local regulations.

Suitable cleaning agents: Water, if necessary with cleaning agent.

SECTION 14: Transport information



Land transport, Sea transport (IMDG), Air transport (ICAO-TI / IATA-DGR)

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:
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

IMO/IMDG

EmS: F-A, S-B

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

HSNO Approval Number HSR002526.

Group standard
Inventory Listing(s)

Cleaning Products (Corrosive) Group Standard 2017

New Zealand: NZIoC (New Zealand Inventory of Chemicals)

All components are listed on the NZIoC 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

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).

Abbreviations and acronyms:

- DNEL Derived No Effect Limit
- AUH GHS Specific hazard statement
- PNEC Predicted No Effect Concentration
- ATE Acute Toxicity Estimate
- · LD50 Lethal Dose, 50% / Median Lethal dose
- LC50 Lethal Concentration, 50% / Median Lethal Concentration
- EC50 effective concentration, 50%
- NOEL No observed effect level
- NOAEL No observed adverse effect level
- STOT-RE Specific target organ toxicity (repeated exposure)
- STOT-SE Specific target organ toxicity (single exposure)
- EC No. European Community Number
- OECD Organization for Economic Cooperation and Development

End of Safety Data Sheet