

Safety Data Sheet

According to Regulation (EC) No 1907/2006

Bryta Dishwashing Detergent

Revision: 2023-09-20 **Version:** 04.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name: Bryta Dishwashing Detergent

UFI: GE17-D0GX-S00V-HUWW

1.2 Relevant identified uses of the substance or mixture and uses advised against

Product use:Dish wash product.
For professional use only.

Uses advised against: Uses other than those identified are not recommended.

SWED - Sector-specific worker exposure description :

AISE_SWED_PW_8a_1 AISE_SWED_PW_1_1 AISE_SWED_PW_4_1

1.3 Details of the supplier of the safety data sheet

Diversey Europe Operations BV, Maarssenbroeksedijk 2, 3542DN Utrecht, The Netherlands

Contact details

Diversey Ltd

Weston Favell Centre, Northampton NN3 8PD, United Kingdom

Tel: 01604 405311, Fax: 01604 406809

Regulatory Email: customerservice.uk@diversey.com

1.4 Emergency telephone number

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

For medical or environmental emergency only:

call 0800 052 0185

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Skin Corr. 1A (H314) Eye Dam. 1 (H318) Met. Corr. 1 (H290)

2.2 Label elements



Signal word: Danger.

Contains sodium hydroxide (Sodium Hydroxide)

Hazard statements:

H290 - May be corrosive to metals.

H314 - Causes severe skin burns and eye damage.

Precautionary statements:

P280 - Wear protective gloves, protective clothing and eye or face protection.

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

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.

2.3 Other hazards

No other hazards known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Ingredient(s)	EC number	CAS number	REACH number	Classification	Notes	Weight
						percent
sodium hydroxide	215-185-5	1310-73-2	01-2119457892-27	Skin Corr. 1A (H314)		10-20
·				Met. Corr. 1 (H290)		
tetrasodium (1-hydroxy ethylidene)bisphosphonate	223-267-7	3794-83-0	[1]	Acute Tox. 4 (H302)		3-10
				Eye Irrit. 2 (H319)		

Specific concentration limits

sodium hydroxide:

- Eye Dam. 1 (H318) >= 2% > Eye Irrit. 2 (H319) >= 0.5%
- Skin Corr. 1C (H314) >= 2% > Skin Irrit. 2 (H315) >= 0.5%

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

ATE, if available, are listed in section 11.

[1] Exempted: ionic mixture. See Regulation (EC) No 1907/2006, Annex V, paragraph 3 and 4. This salt is potentially present, based on calculation, and included for classification and labelling purposes only. Each starting material of the ionic mixture is registered, as required.

For the full text of the H and EUH phrases mentioned in this Section, see Section 16..

SECTION 4: First aid measures

4.1 Description of first aid measures

If unconscious place in recovery position and seek medical advice. Provide fresh air. If breathing is **General Information:**

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

you feel unwell.

Skin contact: Wash skin with plenty of lukewarm, gently flowing water for at least 30 minutes. Take off

immediately all contaminated clothing and wash it before reuse. 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.

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

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

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

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.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear suitable protective clothing. Wear eye/face protection. Wear suitable gloves.

6.2 Environmental precautions

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

6.3 Methods and material for containment and cleaning up

Dyke to collect large liquid spills. Use neutralising agent. Absorb with liquid-binding material (sand, diatomite, universal binders). Do not place spilled materials back into the original container. Collect in closed and suitable containers for disposal.

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 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. 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:

Ingredient(s)	UK - Long term value(s)	UK - Short term value(s)
sodium hydroxide		2 mg/m ³

Biological limit values, if available:

Recommended monitoring procedures, if available:

Additional exposure limits under the conditions of use, if available:

DNEL/DMEL and **PNEC** values

Human exposure

DNEL/DMEL oral exposure - Consumer (mg/kg bw)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
sodium hydroxide	-	-	-	-
tetrasodium (1-hydroxy ethylidene)bisphosphonate	-	-	-	2.4

DNEL/DMEL dermal exposure - Worker

Ingredient(s)	Short term - Local effects	Short term - Systemic effects (mg/kg bw)	Long term - Local effects	Long term - Systemic effects (mg/kg bw)	
sodium hydroxide	2 %	-	-	-	
tetrasodium (1-hydroxy ethylidene)bisphosphonate	No data available	-	No data available	48	

DNEL/DMEL dermal exposure - Consumer

Ingredient(s)	Short term - Local effects	Short term - Systemic effects (mg/kg bw)	Long term - Local effects	Long term - Systemic effects (mg/kg bw)	
sodium hydroxide	2 %	-	-	-	
tetrasodium (1-hydroxy ethylidene)bisphosphonate	No data available	-	No data available	24	

DNEL/DMEL inhalatory exposure - Worker (mg/m³)

ı	Ingredient(s)	Short term - Local	Short term - Systemic	Long term - Local	Long term - Systemic

	effects	effects	effects	effects
sodium hydroxide	-	-	1	-
tetrasodium (1-hydroxy ethylidene)bisphosphonate	-	-	-	16.9

DNEL/DMEL inhalatory exposure - Consumer (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects	
sodium hydroxide	=	-	1	=	
tetrasodium (1-hydroxy ethylidene)bisphosphonate	10	-	10	4.2	

Environmental exposure

Environmental exposure - PNEC

	Ingredient(s)	Surface water, fresh (mg/l)	Surface water, marine (mg/l)	Intermittent (mg/l)	Sewage treatment plant (mg/l)
	sodium hydroxide	-	-		-
tetrasodium	n (1-hydroxy ethylidene)bisphosphonate	0.096	0.01	-	=

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m³)
sodium hydroxide	-	-	-	-
tetrasodium (1-hydroxy ethylidene)bisphosphonate	193	19.3	14	=

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 <u>undiluted</u> product:

Appropriate engineering controls: If the product is diluted by using specific dosing systems with no risk of splashes or direct skin

contact, the personal protection equipment as described in this section is not required. Where possible: use in automated/closed system and cover open containers. Transport over pipes. Filling

with automatic systems. Use tools for manual handling of product.

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

REACH use scenarios considered for the undiluted product:

	SWED - Sector-specific	LCS	PROC	Duration	ERC
	worker exposure			(min)	
	description				
Manual transfer and dilution	AISE_SWED_PW_8a_1	PW	PROC 8a	60	ERC8a

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: 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 <u>diluted</u> product:

Recommended maximum concentration (% w/w): 0.004

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

REACH use scenarios considered for the diluted product:

TENER TO CONTRACTOR OF THE STREET PRODUCT						
	SWFD	LCS	PROC	Duration	FRC	

				(min)	
Automatic application in a dedicated closed system	AISE_SWED_PW_1_1	PW	PROC 1	480	ERC8a
Automatic application in a dedicated system	AISE_SWED_PW_4_1	PW	PROC 4	480	ERC8a

No special requirements under normal use conditions.

Personal protective equipment

Environmental exposure controls:

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. No special requirements under normal use conditions. Respiratory protection:

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Information in this section refers to the product, unless it is specifically stated that substance data is listed

Method / remark

Physical state: Liquid

Colour: Clear , Pale , Yellow **Odour:** Product specific Odour threshold: Not applicable

Melting point/freezing point (°C): Not determined Not relevant to classification of this product

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

Substance data, boiling point

Ingredient(s)	Value (°C)	Method	Atmospheric pressure (hPa)
sodium hydroxide	> 990	Method not given	
tetrasodium (1-hydroxy ethylidene)bisphosphonate	No data available		

Method / remark

Flammability (solid, gas): Not applicable to liquids

Flammability (liquid): Not flammable. Flash point (°C): Not applicable. Sustained combustion: Not applicable. (UN Manual of Tests and Criteria, section 32, L.2)

Lower and upper explosion limit/flammability limit (%): Not determined

Substance data, flammability or explosive limits, if available:

Method / remark

Autoignition temperature: Not determined Decomposition temperature: Not applicable.

pH: >= 11.5 (neat)

Dilution pH: > 11 (0.004 %) Kinematic viscosity: Not determined

Solubility in / Miscibility with water: Fully miscible

ISO 4316

ISO 4316

1.4

Substance data, solubility in water			
Ingredient(s)	Value (g/l)	Method	Temperature (°C)
sodium hydroxide	1000	Method not given	20
tetrasodium (1-hydroxy ethylidene)bisphosphonate	No data available		

Substance data, partition coefficient n-octanol/water (log Kow): see subsection 12.3

Method / remark See substance data

Substance data, vapour pressure

Vapour pressure: Not determined

Substance data, vapour pressure				
Ingredient(s)	Value	Method	Temperature	
	(Pa)		(°C)	
sodium hydroxide	< 1330	Method not given	20	
tetrasodium (1-hydroxy ethylidene)bisphosphonate	No data available			

Method / remark OECD 109 (EU A.3) Relative density: ≈ 1.30 (20 °C)

Relative vapour density: No data available. Not relevant to classification of this product

Particle characteristics: No data available. Not applicable to liquids.

9.2 Other information

9.2.1 Information with regard to physical hazard classes Explosive properties: Not explosive.

Explosive properties: Not explosive.

Oxidising properties: Not oxidising.

Corrosion to metals: Corrosive

9.2.2 Other safety characteristics

Alkali reserve: ≈ 13.8 (g NaOH / 100g; pH=10)

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

May be corrosive to metals. Reacts with acids.

10.6 Hazardous decomposition products

None known under normal storage and use conditions.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

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 (mg/kg)	Species	Method	Exposure time (h)	ATE (mg/kg)
sodium hydroxide		No data				Not established
		available				
tetrasodium (1-hydroxy ethylidene)bisphosphonate	LD 50	2850	Rat	OECD 401 (EU B.1)		940

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)	ATE (mg/kg)
sodium hydroxide	LD 50	1350	Rabbit	Method not given		Not established
tetrasodium (1-hydroxy ethylidene)bisphosphonate	LD 50	> 5000	Rabbit	OECD 402 (EU B.3)		Not established

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			

Acute inhalative toxicity, continued

Ingredient(s)	ATE - inhalation, dust (mg/l)	ATE - inhalation, mist (mg/l)	ATE - inhalation, vapour (mg/l)	ATE - inhalation, gas (mg/l)
sodium hydroxide	Not established	Not established	Not established	Not established
tetrasodium (1-hydroxy ethylidene)bisphosphonate	Not established	Not established	Not established	Not established

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	Mild irritant	Rabbit	OECD 404 (EU B.4)	4 hour(s)

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium hydroxide	Corrosive	Rabbit	Method not given	
tetrasodium (1-hydroxy ethylidene)bisphosphonate	Irritant	Rabbit	OECD 405 (EU B.5)	

Respiratory tract irritation and corrosivity

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

SensitisationSensitisation 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
G (,	` ,	(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 evidence for mutagenicity, negative	draft OECD	No evidence of genotoxicity, negative	OECD 478
ethylidene)bisphosphonate	test results	487	test results	

Carcinogenicity

Ingredient(s)	Effect				
sodium hydroxide	No evidence for carcinogenicity, weight-of-evidence				
tetrasodium (1-hydroxy ethylidene)bisphosphonate	No evidence for carcinogenicity, negative test results				

Toxicity for reproduction

Toxicity for reproduction							
Ingredient(s)	Endpoint	Specific effect	Value	Species	Method	Exposure	Remarks and other effects
			(mg/kg bw/d)			time	reported
sodium hydroxide			No data available				No evidence for developmental toxicity No evidence for reproductive toxicity
tetrasodium (1-hydroxy ethylidene)bisphosphon ate	1		112	Rat	OECD 416, (EU B.35), oral		No evidence for reproductive toxicity

Repeated dose toxicity

Sub-acute or sub-chronic oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
sodium hydroxide		No data available				
tetrasodium (1-hydroxy ethylidene)bisphosphonate	NOAEL	41	Rat	OECD 408 (EU B.26)	90	No effects observed

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				
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)
ĺ	sodium hydroxide	No data available
ĺ	tetrasodium (1-hydroxy ethylidene)bisphosphonate	No data available

STOT-repeated exposure

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

Aspiration hazard

Substances with an aspiration hazard (H304), if any, are listed in section 3.

Potential adverse health effects and symptoms

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

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Endocrine disrupting properties - Human data, if available:

11.2.2 Other information

No other relevant information available.

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	LC 50	195	species		
tellacea.a (, a.e., y e, y laceno, proprietate		. 30			

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium hydroxide	EC 50	40.4	Ceriodaphnia sp.	Method not given	48
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	Method not given	0.25
			m		
			phosphoreum		

osphonate			No da	ata				
			availa	ble				
		Fuducint	l Val		Cnas	:	Mathad	- Fynasiw
		Enapoint	(mg/	1)	Spec	ies	wethod	Exposure time (days
			availa	ble				
osphonate								
		Endpoint			Inocu	lum	Method	Exposur time
osphonate								
Endpoint	Valu	e S	pecies	Met	thod	Exposure	Effects	observed
	(mg/l)				time		
	availal	ole				-		
Endpoint			pecies	Met	thod	Exposure time	Effects	observed
	No da	ta						
NOEC		5 <i>E</i>				28 day(s)		
	•	•	_	•				
uding sediment Endpoint		organisms, i	f available					
	Valu		pecies		thod	Exposure		observed
	(mg/kg sedime	dw ent)			thod	Exposure time (days)		observed
	(mg/kg sedime No da availal	dw ent) ta ole			thod			observed
	(mg/kg sedime No da	ta ole			thod			observed
	(mg/kg sedime No da availal No da	ta ole			thod			observed
orms, if availabl	(mg/kg sedime No da availal No da availal	ent) tta cole tta cole	pecies	Met		time (days)		
	(mg/kg sedime No da availal No da availal e: Valu (mg/kg	dw ent) ta ole ta ole e dw		Met	thod		Effects	observed
orms, if availabl	e: Valu (mg/kg sedime No da availal No da availal	dw set) ta bole bole bole bole bole bole bole bole	pecies	Met		time (days)	Effects	
orms, if availabl	(mg/kg sedime No da availal No da availal e: Valu (mg/kg soil)	dw set) ta bole bole bole bole bole bole bole bole	pecies	Met		time (days)	Effects	
orms, if availabl	e: Valu (mg/kg sedime No da availal Valu (mg/kg soil) No da availal	dw set) ta bole ta bole ta bole sta bole	pecies	Met	thod	Exposure time (days)	Effects	observed
orms, if availabl	e: Valu (mg/kg sedime No da availal No da availal	dw int) ta bole ta bole ta bole ta bole sta bole	pecies	Met		time (days)	Effects	
orms, if availabl	e: Valu (mg/kg soil) No da availal valual valual valual valual valual valual valual valual	dw snt) ta bole ta bole ta bole sta bol	pecies	Met	thod	Exposure time (days)	Effects	observed
orms, if availabl	e: Valu (mg/kg soil) No da availal Valu (mg/kg soil) Valu (mg/kg soil) No da	dw snt) ta bole ta bole ta bole sta bol	pecies	Met	thod	Exposure time (days)	Effects	observed
orms, if availabl	e: Valu (mg/kg soil) No da availal Valu (mg/kg soil) Valu (mg/kg soil) No da	dw int) ta bole ta bole ta bole sta bol	pecies	Met	thod	Exposure time (days) Exposure time (days)	Effects Effects	observed
Endpoint Endpoint	e: Valu (mg/kg soil) No da availal Valu (mg/kg soil) No da availal Valu (mg/kg soil) No da availal	dw int) ta bole	pecies	Met	thod	Exposure time (days) Exposure time (days)	Effects Effects	observed
Endpoint Endpoint	e: Valu (mg/kg soil) No da availal Valu (mg/kg soil) No da availal Valu (mg/kg soil) Valu (mg/kg soil) Valu (mg/kg	dw int) ta bole	pecies	Met	thod	Exposure time (days) Exposure time (days)	Effects Effects	observed
Endpoint Endpoint	e: Value (mg/kg soil) No da availal valua valua	dw int) ta bole S dw ta bole ta bole	pecies	Met	thod	Exposure time (days) Exposure time (days) Exposure time (days)	Effects Effects Effects	observed
Endpoint Endpoint Endpoint	e: Valu (mg/kg soil) No da availal Valu (mg/kg soil) No da availal Valu (mg/kg soil) No da availal	dw int) ta bole ta bole ta bole ta bole ta bole se dw ta bole se dw ta bole se dw ta bole	pecies	Met	thod	Exposure time (days) Exposure time (days) Exposure time (days)	Effects Effects Effects	observed
	NOEC	Endpoint Valu (mg/l No da availal	Endpoint Value (mg/l) No data available No data available Indepoint Value (mg/l) No data available Endpoint Value (mg/l) No data available NOEC 6.75	Endpoint Value (mg/l) No data availae Endpoint Value (mg/l) No data available Endpoint Value (mg/l) No data available No data available	Complete Complete	Complete Complete	Complete Complete	Company Comp

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)	Туре	Half-life time	Method	Evaluation	Remark
I	sodium hydroxide		No data available			

Biodegradation

ndegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT 50	Method	Evaluation
sodium hydroxide					Not applicable (inorganic substance)
tetrasodium (1-hydroxy ethylidene)bisphosphonate	Activated sludge, aerobe			Read across	Not 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:

Degradation in relevant environmental compartments, il available.							
Ingredient(s)	Medium & Type	Analytical	DT 50	Method	Evaluation		
		method					
sodium hydroxide					No data available		

12.3 Bioaccumulative potentialPartition coefficient n-octanol/water (log Kow)

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)

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

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
tetrasodium (1-hydroxy ethylidene)bisphosphonate	No data available				

12.5 Results of PBT and vPvB assessment

Substances that fulfill the criteria for PBT/vPvB, if any, are listed in section 3.

12.6 Endocrine disrupting propertiesEndocrine disrupting properties - Environmental effects, if available:

12.7 Other adverse effects

No other adverse effects known.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

The concentrated contents or contaminated packaging should be disposed of by a certified handler Waste from residues / unused products:

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. **European Waste Catalogue:**

20 01 15* - alkalines.

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

14.1 UN number or ID 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 Maritime transport in bulk according to IMO instruments: The product is not transported in bulk tankers.

Other relevant information:

Classification code: C5 Tunnel restriction code: (E) Hazard identification number: 80

IMO/IMDG

EmS: F-A, S-B

The product has been classified, labelled and packaged in accordance with the requirements of ADR 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:

- Regulation (EC) 1907/2006 REACH (UK amended)
- Regulation (EC) 1272/2008 CLP (UK amended)

 Regulation (EC) 648/2004 Detergents regulation (UK amended)
- Delegated Regulation (EU) 2017/2100 and Regulation (EU) 2018/605 (UK amended)
- · Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)
- International Maritime Dangerous Goods (IMDG) Code

Authorisations or restrictions (Regulation (EC) No 1907/2006, Title VII respectively Title VIII): Not applicable.

Ingredients according to Detergents Regulation

5 - 15 % phosphonates < 5 % polycarboxylates

Comah - classification: Not classified

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out on the mixture

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

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Classification procedure

The classification of the mixture is in general based on calculation methods using substance data, as required by Regulation (EC) No 1272/2008. If for certain classifications data on the mixture is available or for example bridging principles or weight of evidence can be used for classification, this will be indicated in the relevant sections of the Safety Data Sheet. See section 9 for physical chemical properties, section 11 for toxicological information and section 12 for ecological information.

Abbreviations and acronyms:

- · AISE The international Association for Soaps, Detergents and Maintenance Products
- ATE Acute Toxicity Estimate
- DNEL Derived No Effect Limit
- EC50 effective concentration, 50%
- ERC Environmental release categories
- EUH CLP Specific hazard statement
- LC50 Lethal Concentration, 50% / Median Lethal Concentration
- LCS Life cycle stage
- LD50 Lethal Dose, 50% / Median Lethal dose
- · NOAEL No observed adverse effect level
- NOEL No observed effect level
- OECD Organisation for Economic Cooperation and Development
- PBT Persistent, Bioaccumulative and Toxic
- PNEC Predicted No Effect Concentration
- PROC Process categories
 REACH number REACH registration number, without supplier specific part
- vPvB very Persistent and very Bioaccumulative
- H290 May be corrosive to metals.
- H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.

End of Safety Data Sheet