



Clax DS Desotherm 3ZP13

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

1.1 Product identifier

Trade name: Clax DS Desotherm 3ZP13

UFI: 68W1-00TX-X00C-4XJ9

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

Product use: Precursor for multi-component systems or in-situ generation of components.
Laundry detergent.
For professional use only.

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

SWED - Sector-specific worker exposure description :

AISE_SWED_PW_1_1
AISE_SWED_PW_8a_2
AISE_SWED_PW_1_1

1.3 Details of the supplier of the safety data sheet

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

Contact details

Tandur Hf.
Hesth alsi 12, 110 Reykjav ik
Tel. 5101200, Email: tandur@tandur.is

1.4 Emergency telephone number

Seek medical advice (show the label or safety data sheet where possible).
Poison Center: (+354) 543-2222
Emergency services: 112.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Eye Irrit. 2 (H319)

2.2 Label elements



Signal word: Warning.

Hazard statements:

H319 - Causes serious eye irritation.

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 carbonate	207-838-8	497-19-8	01-2119485498-19	Eye Irrit. 2 (H319)		20-30

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zeolite	215-283-8	1318-02-1	01-2119429034-49	Not classified as hazardous	10-20
sodium sulphate	231-820-9	7757-82-6	01-2119519226-43	Not classified as hazardous	10-20
sodium percarbonate	239-707-6	15630-89-4	01-2119457268-30	Ox. Sol. 2 (H272) Acute Tox. 4 (H302) Eye Dam. 1 (H318)	10-20
sodium alkylbenzenesulphonate	290-656-6	90194-45-9	[1]	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318)	3-10
alkyl alcohol ethoxylate	[4]	69011-36-5	[4]	Acute Tox. 4 (H302) Eye Dam. 1 (H318)	1-3
alkyl alcohol ethoxylate	[4]	69011-36-5	[4]	Eye Dam. 1 (H318) Aquatic Chronic 3 (H412)	1-3
sodium silicate	215-687-4	[1]	[1]	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Dam. 1 (H318)	1-3

Specific concentration limits

sodium percarbonate:

- Ox. Sol. 2 (H272) >= 50% > Ox. Sol. 3 (H272) >= 20%
- Eye Dam. 1 (H318) >= 25% > Eye Irrit. 2 (H319) >= 7.5%

alkyl alcohol ethoxylate:

- Eye Dam. 1 (H318) >= 10% > Eye Irrit. 2 (H319) >= 1%

alkyl alcohol ethoxylate:

- Eye Dam. 1 (H318) >= 10% > Eye Irrit. 2 (H319) >= 1%

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.

[4] Exempted: polymer. See Article 2(9) of Regulation (EC) No 1907/2006.

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****Inhalation:**

Get medical attention or advice if you feel unwell.

Skin contact:

Wash skin with plenty of lukewarm, gently flowing water. If skin irritation occurs: Get medical advice or attention.

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. If irritation occurs and persists, get medical attention.

Ingestion:

Rinse mouth. Immediately drink 1 glass of water. Never give anything by mouth to an unconscious person. Get medical attention or advice if you feel unwell.

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:

No known effects or symptoms in normal use.

Eye contact:

Causes severe irritation.

Ingestion:

No known effects or symptoms in normal use.

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.

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**

No special measures required.

6.2 Environmental precautions

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Do not allow to enter drainage system, surface or ground water.

6.3 Methods and material for containment and cleaning up

Collect mechanically. 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 advised by Diversey. Wash hands before breaks and at the end of workday. Avoid contact with 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:

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 carbonate	-	-	-	-
zeolite	-	-	-	1.25
sodium sulphate	-	-	-	-
sodium percarbonate	-	-	-	-
sodium alkylbenzenesulphonate	No data available	No data available	No data available	No data available
alkyl alcohol ethoxylate	-	-	-	-
alkyl alcohol ethoxylate	-	-	-	25
sodium silicate	-	-	-	0.8

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 carbonate	-	-	No data available	-
zeolite	No data available	-	No data available	-
sodium sulphate	-	-	-	-
sodium percarbonate	12.8 mg/cm ² skin	-	12.8 mg/cm ² skin	-
sodium alkylbenzenesulphonate	No data available	No data available	No data available	No data available
alkyl alcohol ethoxylate	-	-	-	-
alkyl alcohol ethoxylate	-	-	-	-
sodium silicate	No data available	-	No data available	1.59

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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 carbonate	No data available	-	No data available	-
zeolite	No data available	-	No data available	1.25
sodium sulphate	-	-	-	-
sodium percarbonate	6.4 mg/cm ² skin	-	6.4 mg/cm ² skin	-
sodium alkylbenzenesulphonate	No data available	No data available	No data available	No data available
alkyl alcohol ethoxylate	-	-	-	-
alkyl alcohol ethoxylate	-	-	-	-
sodium silicate	No data available	-	No data available	0.8

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

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
sodium carbonate	-	-	10	-
zeolite	-	-	3	-
sodium sulphate	-	-	20	20
sodium percarbonate	-	-	5	-
sodium alkylbenzenesulphonate	No data available	No data available	No data available	No data available
alkyl alcohol ethoxylate	-	-	-	-
alkyl alcohol ethoxylate	-	-	-	-
sodium silicate	-	-	-	5.61

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 carbonate	10	-	-	-
zeolite	-	-	0.003	-
sodium sulphate	-	-	12	12
sodium percarbonate	-	-	-	-
sodium alkylbenzenesulphonate	No data available	No data available	No data available	No data available
alkyl alcohol ethoxylate	-	-	-	-
alkyl alcohol ethoxylate	-	-	-	-
sodium silicate	-	-	-	1.38

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 carbonate	-	-	-	-
zeolite	3.2	0.32	-	95
sodium sulphate	-	-	-	-
sodium percarbonate	0.035	0.035	0.035	16.24
sodium alkylbenzenesulphonate	No data available	No data available	No data available	No data available
alkyl alcohol ethoxylate	-	-	-	-
alkyl alcohol ethoxylate	-	-	-	-
sodium silicate	7.5	1	7.5	348

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m ³)
sodium carbonate	-	-	-	-
zeolite	-	-	600	-
sodium sulphate	-	-	-	-
sodium percarbonate	-	-	-	-
sodium alkylbenzenesulphonate	No data available	No data available	No data available	No data available
alkyl alcohol ethoxylate	-	-	-	-
alkyl alcohol ethoxylate	-	-	-	-
sodium silicate	-	-	-	-

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:

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Appropriate engineering controls: No special requirements under normal use conditions.
Appropriate organisational controls: Avoid direct contact and/or splashes where possible. Train personnel.

REACH use scenarios considered for the undiluted product:

	SWED - Sector-specific worker exposure description	LCS	PROC	Duration (min)	ERC
Manual transfer and dilution	AISE_SWED_PW_8a_2	PW	PROC 8a	60	ERC8a
Manual transfer and dilution	AISE_SWED_PW_1_1	PW	PROC 1	60	ERC8a

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.

Recommended safety measures for handling the diluted product:

Recommended maximum concentration (% w/w): 1.1

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:

	SWED	LCS	PROC	Duration (min)	ERC
Automatic application in a dedicated closed system	AISE_SWED_PW_1_1	PW	PROC 1	480	ERC8a

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**

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

Method / remark

Physical state: Solid

Appearance: Powder

Colour: Speckles , Medium , from White to Blue

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

Not applicable to solids or gases

Substance data, boiling point

Ingredient(s)	Value (°C)	Method	Atmospheric pressure (hPa)
sodium carbonate	1600	Method not given	1013
zeolite	No data available		
sodium sulphate	1429	Method not given	1013
sodium percarbonate	Product decomposes before boiling		
sodium alkylbenzenesulphonate	No data available		
alkyl alcohol ethoxylate	> 200	Method not given	
alkyl alcohol ethoxylate	No data available		
sodium silicate	> 100	Method not given	

Method / remark

Flammability (solid, gas): Not determined

Flammability (liquid): Not applicable.

Flash point (°C): Not applicable.

Sustained combustion: Not applicable.

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(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:

Autoignition temperature: Not determined
Decomposition temperature: Not applicable.
pH: Not applicable
Dilution pH: ≈ 10 (1.1 %)
Kinematic viscosity: Not determined
Solubility in / Miscibility with Water: Soluble

Method / remark

ISO 4316
 Not applicable to solids or gases

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
sodium carbonate	210-215	Method not given	20
zeolite	No data available		
sodium sulphate	186	Method not given	20
sodium percarbonate	140	Method not given	20
sodium alkylbenzenesulphonate	No data available		
alkyl alcohol ethoxylate	Soluble	Method not given	20
alkyl alcohol ethoxylate	Partly soluble	Method not given	20
sodium silicate	Soluble	Method not given	20

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

Vapour pressure: Not determined**Method / remark**

See substance data

Substance data, vapour pressure

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
sodium carbonate	Negligible		
zeolite	No data available		
sodium sulphate	No data available		
sodium percarbonate	Negligible		
sodium alkylbenzenesulphonate	No data available		
alkyl alcohol ethoxylate	Negligible	Method not given	20-25
alkyl alcohol ethoxylate	< 100		
sodium silicate	No data available		

Relative density: ≈ 0.64 (20 °C)
Relative vapour density: No data available.
Particle characteristics: Not determined.

Method / remark

OECD 109 (EU A.3)
 Not applicable to solids
 Not relevant to classification of this product.

9.2 Other information**9.2.1 Information with regard to physical hazard classes**

Explosive properties: Not explosive.
Oxidising properties: Not oxidising.
Corrosion to metals: Not determined

Not applicable to solids or gases

9.2.2 Other safety characteristics

No other relevant information available.

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): >2000

Skin irritation and corrosivity**Species:** Not applicable**Eye irritation and corrosivity****Result:** Eye irritant 2**Species:** Not applicable.**Method:** Weight of evidence

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 carbonate	LD ₅₀	2800	Rat	OECD 401 (EU B.1)		15000
zeolite	LD ₅₀	5000 - 31600		Method not given		Not established
sodium sulphate	LD ₅₀	10000	Rat	Method not given		Not established
sodium percarbonate	LD ₅₀	1034	Rat	Method not given		3600
sodium alkylbenzenesulphonate	LD ₅₀	> 1470	Rat	OECD 401 (EU B.1)		21000
alkyl alcohol ethoxylate	LD ₅₀	> 300-2000	Rat	OECD 423 (EU B.1 tris)		26000
alkyl alcohol ethoxylate	LD ₅₀	> 2000	Rat	OECD 423 (EU B.1 tris)		Not established
sodium silicate	LD ₅₀	3400	Rat	Method not given		Not established

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)	ATE (mg/kg)
sodium carbonate	LD ₅₀	> 2000	Rabbit	Method not given		Not established
zeolite	LD ₅₀	2000	Rabbit	Method not given		Not established
sodium sulphate		No data available				Not established
sodium percarbonate	LD ₅₀	> 2000	Rabbit	OECD 402 (EU B.3)		Not established
sodium alkylbenzenesulphonate		No data available				Not established
alkyl alcohol ethoxylate	LD ₅₀	> 2000	Rabbit	Method not given		Not established
alkyl alcohol ethoxylate	LD ₅₀	> 2000	Rat	Method not given		Not established
sodium silicate	LD ₅₀	> 5000	Rat	Method not given		Not established

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium carbonate	LC ₅₀	> 2.3 (dust)		Weight of evidence	2
zeolite	LC ₀	2 - 18.3 (dust)	Rat	Method not given	1
sodium sulphate		No data available			
sodium percarbonate		No data available			
sodium alkylbenzenesulphonate		No data available			
alkyl alcohol ethoxylate		No data available			
alkyl alcohol ethoxylate		No data available			
sodium silicate	LC ₅₀	> 2.06 No mortality observed	Rat	Non guideline test	

Acute inhalative toxicity, continued

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Ingredient(s)	ATE - inhalation, dust (mg/l)	ATE - inhalation, mist (mg/l)	ATE - inhalation, vapour (mg/l)	ATE - inhalation, gas (mg/l)
sodium carbonate	Not established	Not established	Not established	Not established
zeolite	Not established	Not established	Not established	Not established
sodium sulphate	Not established	Not established	Not established	Not established
sodium percarbonate	Not established	Not established	Not established	Not established
sodium alkylbenzenesulphonate	Not established	Not established	Not established	Not established
alkyl alcohol ethoxylate	Not established	Not established	Not established	Not established
alkyl alcohol ethoxylate	Not established	Not established	Not established	Not established
sodium silicate	Not established	Not established	Not established	Not established

Irritation and corrosivity

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium carbonate	Not irritant	Rabbit	OECD 404 (EU B.4)	
zeolite	No data available			
sodium sulphate	No data available			
sodium percarbonate	Not irritant	Rabbit	Method not given	
sodium alkylbenzenesulphonate	No data available			
alkyl alcohol ethoxylate	Not irritant	Rabbit	OECD 404 (EU B.4)	
alkyl alcohol ethoxylate	Not irritant	Rabbit	Weight of evidence Non guideline test	
sodium silicate	Irritant		Method not given	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium carbonate	Irritant	Rabbit	OECD 405 (EU B.5)	
zeolite	No data available			
sodium sulphate	No data available			
sodium percarbonate	Severe damage	Rabbit	EPA OPP 81-4	
sodium alkylbenzenesulphonate	No data available			
alkyl alcohol ethoxylate	Severe damage	Rabbit	Method not given	
alkyl alcohol ethoxylate	Severe damage	Rabbit	Weight of evidence Non guideline test	
sodium silicate	Severe damage		Method not given	

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium carbonate	No data available			
zeolite	No data available			
sodium sulphate	No data available			
sodium percarbonate	Irritating to respiratory tract	Mouse	Method not given	
sodium alkylbenzenesulphonate	No data available			
alkyl alcohol ethoxylate	No data available			
alkyl alcohol ethoxylate	No data available			
sodium silicate	Irritating to respiratory tract		Method not given	

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
sodium carbonate	Not sensitising		Method not given	
zeolite	No data available			
sodium sulphate	Not sensitising		Method not given	
sodium percarbonate	Not sensitising	Guinea pig	OECD 406 (EU B.6) / Buehler test	
sodium alkylbenzenesulphonate	No data available			
alkyl alcohol ethoxylate	Not sensitising	Guinea pig	Method not given	
alkyl alcohol ethoxylate	Not sensitising	Guinea pig		
sodium silicate	Not sensitising		Method not given	

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
sodium carbonate	No data available			
zeolite	No data available			
sodium sulphate	No data available			

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sodium percarbonate	No data available		
sodium alkylbenzenesulphonate	No data available		
alkyl alcohol ethoxylate	No data available		
alkyl alcohol ethoxylate	No data available		
sodium silicate	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 carbonate	No data available		No data available	
zeolite	No data available		No data available	
sodium sulphate	No evidence for mutagenicity		No data available	
sodium percarbonate	No data available		No data available	
sodium alkylbenzenesulphonate	No data available		No data available	
alkyl alcohol ethoxylate	No evidence of genotoxicity, negative test results	Method not given	No evidence of genotoxicity, negative test results	Method not given
alkyl alcohol ethoxylate	No evidence for mutagenicity	OECD 471 (EU B.12/13)	No evidence for mutagenicity, negative test results	Weight of evidence
sodium silicate	No evidence for mutagenicity, negative test results		No data available	

Carcinogenicity

Ingredient(s)	Effect
sodium carbonate	No evidence for carcinogenicity, weight-of-evidence
zeolite	No data available
sodium sulphate	No evidence for carcinogenicity, weight-of-evidence
sodium percarbonate	No data available
sodium alkylbenzenesulphonate	No data available
alkyl alcohol ethoxylate	No evidence for carcinogenicity, weight-of-evidence
alkyl alcohol ethoxylate	No evidence for carcinogenicity, weight-of-evidence
sodium silicate	No evidence for carcinogenicity, negative test results

Toxicity for reproduction

Ingredient(s)	Endpoint	Specific effect	Value (mg/kg bw/d)	Species	Method	Exposure time	Remarks and other effects reported
sodium carbonate			No data available				
zeolite			No data available				
sodium sulphate			No data available				No evidence for reproductive toxicity
sodium percarbonate			No data available				
sodium alkylbenzenesulphonate			No data available				
alkyl alcohol ethoxylate	NOAEL	Teratogenic effects	> 50	Rat	Not known		No known significant effects or critical hazards
alkyl alcohol ethoxylate			-		Weight of evidence		No evidence for reproductive toxicity No evidence for teratogenic effects
sodium silicate			No data available				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 carbonate		No data available				
zeolite		No data available				
sodium sulphate		No data available				
sodium percarbonate		No data available				
sodium alkylbenzenesulphonate		No data available				
alkyl alcohol ethoxylate		No data available				
alkyl alcohol ethoxylate		No data available				
sodium silicate	NOAEL	> 159	Rat	Method not	180	No effects observed

				given		
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Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
sodium carbonate		No data available				
zeolite		No data available				
sodium sulphate		No data available				
sodium percarbonate		No data available				
sodium alkylbenzenesulphonate		No data available				
alkyl alcohol ethoxylate		No data available				
alkyl alcohol ethoxylate		No data available				
sodium silicate		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 carbonate		No data available				
zeolite		No data available				
sodium sulphate		No data available				
sodium percarbonate		No data available				
sodium alkylbenzenesulphonate		No data available				
alkyl alcohol ethoxylate		No data available				
alkyl alcohol ethoxylate		No data available				
sodium silicate		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 carbonate			No data available					
zeolite			No data available					
sodium sulphate			No data available					
sodium percarbonate			No data available					
sodium alkylbenzenesulphonate			No data available					
alkyl alcohol ethoxylate	Oral	NOAEL	50	Rat	Method not given	24 month(s)	Effects on organ weights	
alkyl alcohol ethoxylate			No data available					
sodium silicate			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
sodium carbonate	No data available
zeolite	No data available
sodium sulphate	No data available
sodium percarbonate	No data available
sodium alkylbenzenesulphonate	No data available
alkyl alcohol ethoxylate	Not applicable
alkyl alcohol ethoxylate	Not applicable
sodium silicate	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
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sodium carbonate	No data available
zeolite	No data available
sodium sulphate	No data available
sodium percarbonate	No data available
sodium alkylbenzenesulphonate	No data available
alkyl alcohol ethoxylate	Not applicable
alkyl alcohol ethoxylate	Not applicable
sodium silicate	Not applicable

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 carbonate	LC ₅₀	300	<i>Lepomis macrochirus</i>	Method not given	96
zeolite	LC ₅₀	1800 - 3200	<i>Poecilia reticulata</i>		96
sodium sulphate	LC ₅₀	81 - 1100	Fish	Method not given	96
sodium percarbonate	LC ₅₀	70.7	<i>Pimephales promelas</i>	Method not given	96
sodium alkylbenzenesulphonate	LC ₅₀	No data available			
alkyl alcohol ethoxylate	LC ₅₀	1 - 10	<i>Cyprinus carpio</i>	OECD 203 (EU C.1)	96
alkyl alcohol ethoxylate	LC ₅₀	> 1 - 10	<i>Cyprinus carpio</i>	OECD 203 (EU C.1)	96
sodium silicate	LC ₅₀	1108	<i>Brachydanio rerio</i>	Method not given	96

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium carbonate	EC ₅₀	200-227	<i>Ceriodaphnia dubia</i>	Method not given	96
zeolite	EC ₅₀	2808	<i>Daphnia</i>	OECD 202, static	24
sodium sulphate	EC ₅₀	4580	<i>Daphnia magna Straus</i>	Method not given	48
sodium percarbonate	EC ₅₀	4.9	<i>Daphnia pulex</i>	Method not given	48
sodium alkylbenzenesulphonate	EC ₅₀	1.62	<i>Daphnia magna Straus</i>		48
alkyl alcohol ethoxylate	EC ₅₀	1 - 10	<i>Daphnia magna Straus</i>	OECD 202, static	48
alkyl alcohol ethoxylate	EC ₅₀	> 1 - 10	<i>Daphnia magna Straus</i>	OECD 202 (EU C.2)	48
sodium silicate	EC ₅₀	1700	<i>Daphnia magna Straus</i>	Method not given	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium carbonate	EC ₅₀	> 800	<i>Selenastrum capricornutum</i>		72
zeolite	EC ₅₀	65 - 75	Not specified	Method not given	96

sodium sulphate	EC ₅₀	1900		Non guideline test	120
sodium percarbonate	EC ₅₀	2.5	<i>Chlorella vulgaris</i>	Read across	
sodium alkylbenzenesulphonate	EC ₅₀	29	<i>Selenastrum capricornutum</i>		96
alkyl alcohol ethoxylate	EC ₅₀	1 - 10	<i>Desmodesmus subspicatus</i>	OECD 201, static	72
alkyl alcohol ethoxylate	EC ₅₀	> 1 - 10	<i>Desmodesmus subspicatus</i>	OECD 201 (EU C.3)	72
sodium silicate	EC ₅₀	207	<i>Desmodesmus subspicatus</i>	Method not given	72

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
sodium carbonate		No data available			
zeolite		No data available			
sodium sulphate		No data available			
sodium percarbonate		No data available			
sodium alkylbenzenesulphonate		No data available			
alkyl alcohol ethoxylate		No data available			
alkyl alcohol ethoxylate		No data available			
sodium silicate		No data available			

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
sodium carbonate		No data available			
zeolite		No data available			
sodium sulphate		No data available			
sodium percarbonate	EC ₅₀	466	<i>Activated sludge</i>	OECD 209	0.5 hour(s)
sodium alkylbenzenesulphonate		No data available			
alkyl alcohol ethoxylate	EC ₁₀	> 10000	<i>Activated sludge</i>	DIN 38412 / Part 8	17 hour(s)
alkyl alcohol ethoxylate	EC ₅₀	140	<i>Activated sludge</i>	Weight of evidence	17 hour(s)
sodium silicate		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 carbonate		No data available				
zeolite	EC ₅₀	1800 - 3200	<i>Not specified</i>	Method not given	28 day(s)	
sodium sulphate		No data available				
sodium percarbonate	NOEC	7.4	<i>Pimephales promelas</i>	Method not given	96 hour(s)	
sodium alkylbenzenesulphonate		No data available				
alkyl alcohol ethoxylate		No data available				
alkyl alcohol ethoxylate	NOEC	1.73	<i>Not specified</i>	QSAR Weight of evidence	96 hour(s)	
sodium silicate	NOEC	348	<i>Brachydanio rerio</i>	Method not given	96 hour(s)	

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
sodium carbonate		No data available				

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zeolite		No data available				
sodium sulphate		No data available				
sodium percarbonate	NOEC	2	<i>Daphnia pulex</i>	Method not given	48 hour(s)	
sodium alkylbenzenesulphonate		No data available				
alkyl alcohol ethoxylate		No data available				
alkyl alcohol ethoxylate	NOEC	1.36	<i>Daphnia magna</i> Not specified	QSAR Weight of evidence	21 day(s)	
sodium silicate		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 carbonate		No data available				
zeolite		No data available				
sodium sulphate		No data available				
sodium percarbonate		No data available				
sodium alkylbenzenesulphonate		No data available				
alkyl alcohol ethoxylate		No data available				
alkyl alcohol ethoxylate		No data available				
sodium silicate		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 carbonate		No data available				
alkyl alcohol ethoxylate	NOEC	220	<i>Eisenia fetida</i>			
alkyl alcohol ethoxylate	LD ₅₀	> 1000	<i>Eisenia fetida</i>	OECD 207	14	

Terrestrial toxicity - plants, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
sodium carbonate		No data available				
alkyl alcohol ethoxylate	NOEC	10	<i>Lepidium sativum</i>	OECD 208		
alkyl alcohol ethoxylate	EC ₅₀	> 100	<i>Triticum aestivum</i> <i>Lepidium sativum</i> <i>Brassica alba</i>	OECD 208		

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
sodium carbonate		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 carbonate		No data available				

Terrestrial toxicity - soil bacteria, if available:

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

Ingredient(s)	soil)				
sodium carbonate	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 carbonate	No data available			
sodium percarbonate	NA	Method not given		

Abiotic degradation - hydrolysis, if available:

Ingredient(s)	Half-life time in fresh water	Method	Evaluation	Remark
sodium carbonate	No data available		Rapidly hydrolysible	
sodium percarbonate	< 1 day(s)	Method not given	Hydrolysible	

Abiotic degradation - other processes, if available:

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

Biodegradation

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT ₅₀	Method	Evaluation
sodium carbonate					Not applicable (inorganic substance)
zeolite					Not applicable (inorganic substance)
sodium sulphate					Not applicable (inorganic substance)
sodium percarbonate					Not applicable (inorganic substance)
sodium alkylbenzenesulphonate				OECD 301B	Readily biodegradable
alkyl alcohol ethoxylate	Activated sludge, aerobe	CO ₂ production	> 60 % in 28 day(s)	OECD 301B	Readily biodegradable
alkyl alcohol ethoxylate		CO ₂ production	> 60 % in 28 day(s)	OECD 301B	Readily biodegradable
sodium silicate					Not applicable (inorganic substance)

Ready biodegradability - anaerobic and marine conditions, if available:

Ingredient(s)	Medium & Type	Analytical method	DT ₅₀	Method	Evaluation
sodium carbonate					No data available
alkyl alcohol ethoxylate					Biodegradable

Degradation in relevant environmental compartments, if available:

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

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log K_{ow})

Ingredient(s)	Value	Method	Evaluation	Remark
sodium carbonate	No data available		No bioaccumulation expected	
zeolite	No data available			
sodium sulphate	-4.38	Method not given	No bioaccumulation expected	
sodium percarbonate	No data available			
sodium alkylbenzenesulphonate	No data available			
alkyl alcohol ethoxylate	4.09	QSAR	No bioaccumulation expected	
alkyl alcohol ethoxylate	No data available		Not relevant, does not bioaccumulate	
sodium silicate	No data available		Low potential for bioaccumulation	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
sodium carbonate	No data available			No bioaccumulation expected	
zeolite	No data available				

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sodium sulphate	No data available				
sodium percarbonate	No data available				
sodium alkylbenzenesulphonate	No data available				
alkyl alcohol ethoxylate	-			No bioaccumulation expected	
alkyl alcohol ethoxylate	No data available				
sodium silicate	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 carbonate	No data available				Potential for mobility in soil, soluble in water
zeolite	No data available				
sodium sulphate	No data available				Potential for mobility in soil, soluble in water
sodium percarbonate	No data available				High potential for mobility in soil
sodium alkylbenzenesulphonate	No data available				
alkyl alcohol ethoxylate	No data available				Immobile in soil or sediment
alkyl alcohol ethoxylate	No data available				
sodium silicate	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 properties

Endocrine 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****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**Land transport (ADR/RID), Sea transport (IMDG), Air transport (ICAO-TI / IATA-DGR)****14.1 UN number:** Non-dangerous goods**14.2 UN proper shipping name:** Non-dangerous goods**14.3 Transport hazard class(es):** Non-dangerous goods**14.4 Packing group:** Non-dangerous goods**14.5 Environmental hazards:** Non-dangerous goods**14.6 Special precautions for user:** Non-dangerous goods**14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code:** Non-dangerous goods**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulations:**

- Regulation (EC) No. 1907/2006 - REACH
- Regulation (EC) No 1272/2008 - CLP
- Regulation (EC) No. 648/2004 - Detergents regulation
- Regulation (EU) No 528/2012 on biocidal products

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- substances identified as having endocrine disrupting properties in accordance with the criteria set out in Delegated Regulation (EU) 2017/2100 or Regulation (EU) 2018/605
- 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 EC Detergents Regulation 648/2004

zeolites	15 - 30 %
oxygen-based bleaching agents, anionic surfactants	5 - 15 %
non-ionic surfactants, polycarboxylates, soap, phosphonates	< 5 %
perfumes , optical brighteners, enzymes	

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

Seveso - 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

SDS code: MS1002005

Version: 01.4

Revision: 2022-05-04

Reason for revision:

Overall design adjusted in accordance with Amendment 2020/878, Annex II of Regulation (EC) No 1907/2006, This data sheet contains changes from the previous version in section(s):, 3, 6, 8, 9, 11, 12, 16

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.

Full text of the H and EUH phrases mentioned in section 3:

- H272 - May intensify fire; oxidiser.
- H302 - Harmful if swallowed.
- H315 - Causes skin irritation.
- H318 - Causes serious eye damage.
- H319 - Causes serious eye irritation.
- H335 - May cause respiratory irritation.
- H412 - Harmful to aquatic life with long lasting effects.

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
- PROOC - Process categories
- REACH number - REACH registration number, without supplier specific part
- vPvB - very Persistent and very Bioaccumulative

End of Safety Data Sheet