

Safety Data Sheet

According to Regulation (EC) No 1907/2006

Clax Microwash forte Pur-Eco 32B1

Revision: 2024-08-08 Version: 15.0

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

1.1 Product identifier

Trade name: Clax Microwash forte Pur-Eco 32B1

UFI: CYM5-9082-T00G-T428

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

Product use: Laundry detergent. For professional use only.

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

 \mbox{SWED} - Sector-specific worker exposure description : $\mbox{AISE_SWED_PW_8a_1}$ $\mbox{AISE_SWED_PW_4_1}$

1.3 Details of the supplier of the safety data sheet

Diversey Europe Operations BV, De Corridor 4, 3621ZB Breukelen [Maarssenbroeksedijk 2, 3542DN Utrecht], The Netherlands

Contact details

Tandur Hf.

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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

Skin irritation, Category 2 (H315) Serious eye damage, Category 1 (H318)

2.2 Label elements



Signal word: Danger.

Contains C12-14 alcohols, ethoxylated (7EO) (C12-14 Pareth-7), sulphuric acid, mono-C12-18-alkyl esters, sodium salts (Sodium C12-18 Alkyl Sulfate)

Hazard statements:

H315 - Causes skin irritation.

H318 - Causes serious eye damage.

Precautionary statements:

P280 - Wear eye or face protection.

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 carbonate	207-838-8	497-19-8	01-211948549 8-19	Eye irritation, Category 2 (H319)		50-75
disodium trisilicate	215-687-4	1344-09-8	5-31	Specific target organ toxicity - Single exposure, Category 3 (H335) Skin irritation, Category 2 (H315) Eye irritation, Category 2 (H319)		10-20
C12-14 alcohols, ethoxylated (7EO)	[4]	68439-50-9		Acute toxicity - Oral, Category 4 (H302) Serious eye damage, Category 1 (H318) Chronic aquatic toxicity, Category 3 (H412)		3-10
Citric acid	201-069-1	77-92-9	6-42	Specific target organ toxicity - Single exposure, Category 3 (H335) Eye irritation, Category 2 (H319)		1-3
sulphuric acid, mono-C12-18-alkyl esters, sodium salts	273-257-1	68955-19-1	5-39	Skin irritation, Category 2 (H315) Serious eye damage, Category 1 (H318) Chronic aquatic toxicity, Category 3 (H412)		1-3
C12-14 alcohols, ethoxylated (3EO)	[4]	68439-50-9	''	Eye irritation, Category 2 (H319) Acute aquatic toxicity, Category 1 M=1 (H400) Chronic aquatic toxicity, Category 3 (H412)		1-3

Specific concentration limits

sulphuric acid, mono-C12-18-alkyl esters, sodium salts:

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

ATE, if available, are listed in section 11

[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. Immediately call a POISON CENTRE,

doctor or physician.

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: Causes irritation.

Eye contact:Ingestion:
Causes severe or permanent damage.
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

Wear eye/face protection. Repeated or prolonged contact:. Wear suitable gloves.

6.2 Environmental precautions

[•] Serious eye damage, Category 1 (H318) >= 20% > Eye irritation, Category 2 (H319) >= 10%

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 adviced by Diversey. Wash face, hands and any exposed skin thoroughly after handling. Take off 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:

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	-	-	-	-
disodium trisilicate	-	-	-	0.8
C12-14 alcohols, ethoxylated (7EO)	No data available	No data available	No data available	No data available
Citric acid	-	-	-	-
sulphuric acid, mono-C12-18-alkyl esters, sodium salts	-	-	-	24
C12-14 alcohols, ethoxylated (3EO)	_	-	-	-

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	-
disodium trisilicate	No data available	-	No data available	1.59
C12-14 alcohols, ethoxylated (7EO)	No data available	No data available	No data available	No data available
Citric acid	No data available	-	No data available	-
sulphuric acid, mono-C12-18-alkyl esters, sodium salts	-	-	-	4060
C12-14 alcohols, ethoxylated (3EO)	-	-	-	-

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	-

disodium trisilicate	No data available	-	No data available	0.8
C12-14 alcohols, ethoxylated (7EO)	No data available	No data available	No data available	No data available
Citric acid	No data available	-	No data available	-
sulphuric acid, mono-C12-18-alkyl esters, sodium salts	-	-	-	2440
C12-14 alcohols, ethoxylated (3EO)	-	-	-	-

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	-
disodium trisilicate	-	-	-	5.61
C12-14 alcohols, ethoxylated (7EO)	No data available	No data available	No data available	No data available
Citric acid	-	-	-	-
sulphuric acid, mono-C12-18-alkyl esters, sodium salts	-	-	-	285
C12-14 alcohols, ethoxylated (3EO)	-	-	-	-

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	-	-	-
disodium trisilicate	-	-	-	1.38
C12-14 alcohols, ethoxylated (7EO)	No data available	No data available	No data available	No data available
Citric acid	-	-	-	-
sulphuric acid, mono-C12-18-alkyl esters, sodium salts	-	-	-	85
C12-14 alcohols, ethoxylated (3EO)	-	-	-	-

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	-	-	-	-
disodium trisilicate	7.5	1	7.5	348
C12-14 alcohols, ethoxylated (7EO)	No data available	No data available	No data available	No data available
Citric acid	0.44	0.044	-	> 1000
sulphuric acid, mono-C12-18-alkyl esters, sodium salts	0.098	0.0098	0.013	6.8
C12-14 alcohols, ethoxylated (3EO)	-	-	-	-

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m³)
sodium carbonate	-	-	-	-
disodium trisilicate	-	-	-	-
C12-14 alcohols, ethoxylated (7EO)	No data available	No data available	No data available	No data available
Citric acid	34.6	3.46	33.1	-
sulphuric acid, mono-C12-18-alkyl esters, sodium salts	3.45	0.345	0.631	-
C12-14 alcohols, ethoxylated (3EO)	-	-	=	-

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.

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_1	PW	PROC 8a	60	ERC8a

Personal protective equipment Eye / face protection: Hand protection:

Safety glasses or goggles (EN 16321 / EN 166).

Rinse and dry hands after use. For prolonged contact protection for the skin may be necessary. Repeated or prolonged contact: 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: No special requirements under normal use conditions.

Respiratory protection: If exposure to dust cannot be avoided use: full-face mask (EN 136) with filter type HEPA (N100,

Class H14) (EN 1822) or self-contained or compressed air breathing apparatus (EN 137 / EN 138) Consider specific local use conditions. In consultation with the supplier of respiratory protection

equipment a different type providing similar protection may be chosen.

Environmental exposure controls: No special requirements under normal use conditions.

Recommended safety measures for handling the <u>diluted</u> product:

Recommended maximum concentration (% w/w): 2.7

Appropriate engineering controls:

Appropriate organisational controls:

No special requirements under normal use conditions.

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 system	AISE_SWED_PW_4_1	PW	PROC 4	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
Colour: White
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
disodium trisilicate	> 100	Method not given	
C12-14 alcohols, ethoxylated (7EO)	No data available		
Citric acid	No data available		
sulphuric acid, mono-C12-18-alkyl esters, sodium salts	208	OECD 103 (EU A.2)	
C12-14 alcohols, ethoxylated (3EO)	No data available		

Method / remark

Flammability (solid, gas): Not determined Flammability (liquid): Not applicable.
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: Not applicable

Dilution pH: ≈ 11 (2.7 %) ISO 4316

Kinematic viscosity: Not determined Not applicable to solids or gases

Solubility in / Miscibility with water: Soluble

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
sodium carbonate	210-215	Method not given	20
disodium trisilicate	Soluble	Method not given	20
C12-14 alcohols, ethoxylated (7EO)	Soluble	Method not given	
Citric acid	1630	Method not given	
sulphuric acid, mono-C12-18-alkyl esters, sodium salts	Soluble		
C12-14 alcohols, ethoxylated (3EO)	Insoluble		

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

Method / remark
See substance data

Vapour pressure: Not determined

Substance data, vapour pressure

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
sodium carbonate	Negligible		
disodium trisilicate	No data available		
C12-14 alcohols, ethoxylated (7EO)	No data available		
Citric acid	No data available		
sulphuric acid, mono-C12-18-alkyl esters, sodium salts	< 0.1	Method not given	25
C12-14 alcohols, ethoxylated (3EO)	No data available		

Method / remark

OECD 109 (EU A.3) Not applicable to solids

Not relevant to classification of this product.

Relative density: ≈ 1.10 (20 °C) Relative vapour density: No data available.

Particle characteristics: Not determined.

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 characteristicsNo 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 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

In an adjoint (a)	Endnaint	Value	Cassias	Method	Evenne	ATE Oral
Ingredient(s)	Endpoint		Species	Wethod	Exposure time (h)	
		(mg/kg)			time (n)	(mg/kg)
sodium carbonate	LD 50	2800	Rat	OECD 401 (EU B.1)		2800
disodium trisilicate	LD 50	3400	Rat	Method not given		Not established
C12-14 alcohols, ethoxylated (7EO)	LD 50	> 300 - 2000	Rat	Read across		16000
Citric acid	LD 50	5400-11700	Rat	Method not given		Not established
sulphuric acid, mono-C12-18-alkyl esters, sodium salts	LD 50	4010	Rat	OECD 401 (EU B.1)		Not established
C12-14 alcohols, ethoxylated (3EO)	LD 50	> 5000	Rat	OECD 401 (EU B.1)		Not established

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)	ATE Dermal (mg/kg)
sodium carbonate	LD 50	> 2000	Rabbit	Method not given		Not established
disodium trisilicate	LD 50	> 5000	Rat	Method not given		Not established
C12-14 alcohols, ethoxylated (7EO)	LD 50	> 2000	Rabbit	Method not given		Not established
Citric acid	LD 50	> 2000	Rat	Method not given		Not established
sulphuric acid, mono-C12-18-alkyl esters, sodium salts	LD 50	> 2000		Method not given		Not established
C12-14 alcohols, ethoxylated (3EO)		No data available				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
disodium trisilicate		No mortality observed	Rat	Method not given Non guideline test	4
C12-14 alcohols, ethoxylated (7EO)		No data available		-	
Citric acid		No data available			
sulphuric acid, mono-C12-18-alkyl esters, sodium salts		No data available			
C12-14 alcohols, ethoxylated (3EO)		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 carbonate	Not established	Not established	Not established	Not established
disodium trisilicate	Not established	Not established	Not established	Not established
C12-14 alcohols, ethoxylated (7EO)	Not established	Not established	Not established	Not established
Citric acid	Not established	Not established	Not established	Not established
sulphuric acid, mono-C12-18-alkyl esters, sodium salts	Not established	Not established	Not established	Not established
C12-14 alcohols, ethoxylated (3EO)	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)	
disodium trisilicate	Irritant		Method not given	
C12-14 alcohols, ethoxylated (7EO)	Not irritant		Read across	
Citric acid	Not irritant	Rabbit	OECD 404 (EU B.4)	
sulphuric acid, mono-C12-18-alkyl esters, sodium salts	Irritant	Rabbit	OECD 404 (EU B.4)	
C12-14 alcohols, ethoxylated (3EO)	Not irritant			

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium carbonate	Irritant	Rabbit	OECD 405 (EU B.5)	
disodium trisilicate	Severe damage Irritant		Method not given	
C12-14 alcohols, ethoxylated (7EO)	Severe damage	Rabbit	Read across	
Citric acid	Severe damage Irritant	Rabbit	OECD 405 (EU B.5)	
sulphuric acid, mono-C12-18-alkyl esters, sodium salts	Severe damage	Rabbit	OECD 405 (EU B.5)	
C12-14 alcohols, ethoxylated (3EO)	Irritant			

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium carbonate	No data available			
disodium trisilicate	Irritating to respiratory tract		Method not given	
C12-14 alcohols, ethoxylated (7EO)	No data available			
Citric acid	No data available			
sulphuric acid, mono-C12-18-alkyl esters, sodium salts	Irritating to respiratory tract		Method not given	
C12-14 alcohols, ethoxylated (3EO)	No data available			

Sensitisation Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
sodium carbonate	Not sensitising		Method not given	
disodium trisilicate	Not sensitising		Method not given	
C12-14 alcohols, ethoxylated (7EO)	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	
Citric acid	Not sensitising	Guinea pig	Method not given	
sulphuric acid, mono-C12-18-alkyl esters, sodium salts	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	
C12-14 alcohols, ethoxylated (3EO)	No data available			

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
sodium carbonate	No data available			
disodium trisilicate	No data available			
C12-14 alcohols, ethoxylated (7EO)	No data available			
Citric acid	No data available			
sulphuric acid, mono-C12-18-alkyl esters, sodium salts	No data available			
C12-14 alcohols, ethoxylated (3EO)	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	
disodium trisilicate	No evidence for mutagenicity, negative test results		No data available	
C12-14 alcohols, ethoxylated (7EO)	No evidence for mutagenicity, negative test results	Read across	No data available	
Citric acid	No data available	1	No evidence of genotoxicity, negative test results	Method not given
sulphuric acid, mono-C12-18-alkyl esters, sodium salts	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13)	No data available	
C12-14 alcohols, ethoxylated (3EO)	No data available		No data available	

Carcinogenicity

Carolingoniony	
Ingredient(s)	Effect
sodium carbonate	No evidence for carcinogenicity, weight-of-evidence
disodium trisilicate	No evidence for carcinogenicity, negative test results
C12-14 alcohols, ethoxylated (7EO)	No data available
Citric acid	No evidence for carcinogenicity, negative test results
sulphuric acid, mono-C12-18-alkyl esters, sodium salts	No evidence for carcinogenicity, weight-of-evidence
C12-14 alcohols, ethoxylated (3EO)	No data available

Toxicity for reproduction

Ingredient(s)	Endpoint	Specific effect	Value (mg/kg bw/d)	Species	Method	Exposure time	Remarks and other effects reported
sodium carbonate			No data				

	available	
	** ** ***	
disodium trisilicate	No data	No evidence for reproductive
	available	toxicity
C12-14 alcohols,	No data	
ethoxylated (7EO)	available	
Citric acid	No data	No evidence for reproductive
	available	toxicity
sulphuric acid,	No data	No evidence for reproductive
mono-C12-18-alkyl	available	toxicity
esters, sodium salts		
C12-14 alcohols,	No data	
ethoxylated (3EO)	available	

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

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	
sodium carbonate		No data available			unic (days)	uncolou
disodium trisilicate	NOAEL	> 159	Rat	Method not given	180	No effects observed
C12-14 alcohols, ethoxylated (7EO)		No data available				
Citric acid		No data available				
sulphuric acid, mono-C12-18-alkyl esters, sodium salts		No data available				
C12-14 alcohols, ethoxylated (3EO)		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 carbonate		No data available				
disodium trisilicate		No data available				
C12-14 alcohols, ethoxylated (7EO)		No data available				
Citric acid		No data available				
sulphuric acid, mono-C12-18-alkyl esters, sodium salts		No data available				
C12-14 alcohols, ethoxylated (3EO)		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				
disodium trisilicate		No data available				
C12-14 alcohols, ethoxylated (7EO)		No data available				
Citric acid		No data available				
sulphuric acid, mono-C12-18-alkyl esters, sodium salts		No data available				
C12-14 alcohols, ethoxylated (3EO)		No data available				

Chronic toxicity

Ingredient(s)	Exposure	Endpoint	Value	Species	Method	Exposure	Specific effects and	Remark
	route		(mg/kg bw/d)			time	organs affected	
sodium carbonate			No data					
			available					
disodium trisilicate			No data					
			available					
C12-14 alcohols,			No data					
ethoxylated (7EO)			available					
Citric acid			No data					
			available					
sulphuric acid,			No data					
mono-C12-18-alkyl			available					
esters, sodium salts								
C12-14 alcohols,			No data					
ethoxylated (3EO)			available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
sodium carbonate	Not applicable
disodium trisilicate	No data available
C12-14 alcohols, ethoxylated (7EO)	No data available
Citric acid	No data available
sulphuric acid, mono-C12-18-alkyl esters, sodium salts	No data available
C12-14 alcohols, ethoxylated (3EO)	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
sodium carbonate	Not applicable
disodium trisilicate	Not applicable
C12-14 alcohols, ethoxylated (7EO)	No data available
Citric acid	No data available
sulphuric acid, mono-C12-18-alkyl esters, sodium salts	No data available
C12-14 alcohols, ethoxylated (3EO)	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 carbonate	LC 50	300	Lepomis macrochirus	Method not given	96
disodium trisilicate	LC 50	260 - 310	Brachydanio rerio Oncorhynchus mykiss	Method not given	96
C12-14 alcohols, ethoxylated (7EO)	LC 50	> 1 - 10	Brachydanio rerio	Read across	96
Citric acid	LC 50	440	Leuciscus idus	Method not given	48
sulphuric acid, mono-C12-18-alkyl esters, sodium salts	LC 50	1-10	Brachydanio rerio	OECD 203, flow-through	96
C12-14 alcohols, ethoxylated (3EO)	LC 50	> 1-<10	Brachydanio rerio		96

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium carbonate	EC 50	200-227	Ceriodaphnia dubia	Method not given	96
disodium trisilicate	EC 50	1700	Daphnia magna Straus	Method not given OECD 202, static	48
C12-14 alcohols, ethoxylated (7EO)	EC 50	> 1 - 10	Daphnia magna Straus	Method not given	48
Citric acid	EC 50	1535	Daphnia magna Straus	Method not given	24
sulphuric acid, mono-C12-18-alkyl esters, sodium salts	EC 50	1 - 10	Daphnia magna Straus	OECD 202, static	48
C12-14 alcohols, ethoxylated (3EO)	EC 50	> 0.1-<1	Daphnia		48

	C(
	l magna Straus	
	mayna onaus	

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium carbonate	EC 50	> 800	Selenastrum capricornutum		72
disodium trisilicate	EC 50	207	Desmodesmus subspicatus	DIN 38412, Part 9	72
C12-14 alcohols, ethoxylated (7EO)	NOEC	> 0.1 - 1	Not specified	DIN 38412, Part 9 OECD 201 (EU C.3)	
Citric acid	LC 50	425	Scenedesmus quadricauda	Method not given	168
sulphuric acid, mono-C12-18-alkyl esters, sodium salts	EC 50	10 - 100	Desmodesmus subspicatus	OECD 201 (EU C.3)	72
C12-14 alcohols, ethoxylated (3EO)	NOEC	> 0.1-<1	Desmodesmus subspicatus		

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
sodium carbonate		No data available			
disodium trisilicate		No data available			
C12-14 alcohols, ethoxylated (7EO)		No data available			
Citric acid		No data available			
sulphuric acid, mono-C12-18-alkyl esters, sodium salts		No data available			
C12-14 alcohols, ethoxylated (3EO)		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			
disodium trisilicate		No data available			
C12-14 alcohols, ethoxylated (7EO)		> 1000	Activated sludge	DEV-L2	
Citric acid	EC 50	> 10000	Pseudomonas putida	Method not given	16 hour(s)
sulphuric acid, mono-C12-18-alkyl esters, sodium salts	EC ₀	> 100	Bacteria	DIN 38412, Part 27 OECD 209	
C12-14 alcohols, ethoxylated (3EO)	EC ₀	> 10000	Pseudomonas putida	DIN 38412 / Part 8	

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				
disodium trisilicate	NOEC	348	Brachydanio rerio	Method not given	96 hour(s)	
C12-14 alcohols, ethoxylated (7EO)	EC 50	10-100	Not specified	Method not given	96 hour(s)	
Citric acid		No data available				
sulphuric acid, mono-C12-18-alkyl esters, sodium salts	NOEC	≤1	Not specified	Method not given		
C12-14 alcohols, ethoxylated (3EO)		No data available				

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
sodium carbonate		No data available				
disodium trisilicate		No data available				
C12-14 alcohols, ethoxylated (7EO)	EC 50	10-100	Not specified	Method not given	48 hour(s)	
Citric acid		No data available				

sulphuric acid, mono-C12-18-alkyl esters, sodium salts	NOEC	≤ 1	Not specified	Method not given	
C12-14 alcohols, ethoxylated (3EO)		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				
disodium trisilicate		No data available				
C12-14 alcohols, ethoxylated (7EO)		No data available				
Citric acid		No data available				
sulphuric acid, mono-C12-18-alkyl esters, sodium salts		No data available				
C12-14 alcohols, ethoxylated (3EO)		No data available				

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

refrestrat toxicity - soil invertebrates, including earthwork	ns, ii avanabi	<u>c.</u>				
Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Effects observed
3 *** (4)		(mg/kg dw			time (days)	
		soil)			` , ,	
sodium carbonate		No data				
		available				
Citric acid		No data				
		available				

Terrestrial toxicity - plants, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
sodium carbonate		No data available				
Citric acid		No data available				

Terrestrial toxicity - birds, if available:

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

Terrestrial toxicity - heneficial insects if available:

refrestrial toxicity - beneficial filsects, if available.						
Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Effects observed
• ()		(mg/kg dw	•		time (days)	
					lillic (days)	
		soil)				
sodium carbonate		No data				
		available				
Citric acid		No data				
	ĺ	available			[

Terrestrial toxicity - soil bacteria, if available:

Terrestrial texicity Soil bacteria, il available.						
Ingredient(s)	Endpoint	Value (mg/kg dw	Species	Method	Exposure time (days)	Effects observed
		soil)				
sodium carbonate		No data				
		available				
Citric acid		No data				
		available				

12.2 Persistence and degradability

Abiotic degradation
Abiotic degradation - photodegradation in air, if available:

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

Abiotic degradation - hydrolysis, if available:

The state of the s								
	Ingredient(s)	Half-life time in fresh	Method	Evaluation	Remark			

	water		
sodium carbonate	No data available	Rapidly hydrolysible	
Citric acid	No data available		

Abiotic degradation - other processes, if available:

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

BiodegradationReady biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT 50	Method	Evaluation
sodium carbonate					Not applicable (inorganic substance)
disodium trisilicate					Not applicable (inorganic substance)
C12-14 alcohols, ethoxylated (7EO)		CO ₂ production	> 60 % in 28 day(s)	OECD 301B	Readily biodegradable
Citric acid			97 % in 28 day(s)	Method not given OECD 301B	Readily biodegradable
sulphuric acid, mono-C12-18-alkyl esters, sodium salts	Activated sludge, aerobe	CO ₂ production	93% in 28 day(s)	OECD 301B	Readily biodegradable
C12-14 alcohols, ethoxylated (3EO)	Activated sludge, aerobe	CO ₂ production	> 60 % in 28 day(s)	OECD 301B	Readily biodegradable

Ready biodegradability - anaerobic and marine conditions, if available:

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

Degradation in relevant environmental compartments, if available:

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

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

Ingredient(s)	Value	Method	Evaluation	Remark
sodium carbonate	No data available		No bioaccumulation expected	
disodium trisilicate	No data available		Low potential for bioaccumulation Not relevant, does not bioaccumulate	
C12-14 alcohols, ethoxylated (7EO)	No data available		No bioaccumulation expected	
Citric acid	-1.72		No bioaccumulation expected	
sulphuric acid, mono-C12-18-alkyl esters, sodium salts	≤ -2.1	OECD 107	No bioaccumulation expected	
C12-14 alcohols, ethoxylated (3EO)	No data available			

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
sodium carbonate	No data available			No bioaccumulation expected	
disodium trisilicate	No data available				
C12-14 alcohols, ethoxylated (7EO)	No data available				
Citric acid	No data available				
sulphuric acid, mono-C12-18-alkyl esters, sodium salts	No data available				
C12-14 alcohols, ethoxylated (3EO)	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
disodium trisilicate	No data available				

C12-14 alcohols, ethoxylated (7EO)	No data available	≥ 4		Potential for adsorption to soil
Citric acid	No data available			Potential for mobility in soil, soluble in water
sulphuric acid, mono-C12-18-alkyl esters, sodium salts	No data available			
C12-14 alcohols, ethoxylated (3EO)	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 or ID number: Non-dangerous goods14.2 UN proper shipping name: Non-dangerous goods14.3 Transport hazard class(es): Non-dangerous goods

14.4 Packing group: Non-dangerous goods

14.5 Environmental hazards: Non-dangerous goods14.6 Special precautions for user: Non-dangerous goods

14.7 Maritime transport in bulk according to IMO instruments: 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
- 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

phosphates 5 - 15 % non-ionic surfactants, anionic surfactants < 5 % 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: MSDS5868 Version: 15.0 Revision: 2024-08-08

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, 4, 8, 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.

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
- H302 Harmful if swallowed.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- · H335 May cause respiratory irritation.
- H400 Very toxic to aquatic life.
- H412 Harmful to aquatic life with long lasting effects.

End of Safety Data Sheet