Safety Data Sheet

According to Regulation (EC) No 1907/2006

Suma Break up D3.5 JFlex

Revision: 2022-06-19 **Version:** 04.0

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

1.1 Product identifier

Trade name: Suma Break up D3.5 JFlex

UFI: DQ25-J0H9-8000-UGX9

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

Product use:	Kitchen surface cleaner. For professional use only.
Uses advised against:	Uses other than those identified are not recommended.

SWED - Sector-specific worker exposure description :
AISE_SWED_PW_4_2
AISE_SWED_PW_8a_1
AISE_SWED_PW_8b_1
AISE_SWED_PW_10_1
AISE_SWED_PW_11_1
AISE_SWED_PW_19_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 Irrit. 2 (H315)
Eye Dam. 1 (H318)

2.2 Label elements

Signal word: Danger.

Contains sodium silicate (Sodium Metasilicate), sodium alkylbenzenesulphonate (Sodium Dodecylbenzenesulfonate), cocoamidopropyl betaine hydrogenated (Cocamidopropyl Betaine), alkyl alcohol ethoxylate (C9-11 Pareth-5-10)

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 silicate	215-687-4	1344-09-8	[1]	Skin Corr. 1B (H314) STOT SE 3 (H335) Eye Dam. 1 (H318) Met. Corr. 1 (H290)		3-10
sodium alkylbenzenesulphonate	290-656-6	90194-45-9	[1]	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318)		1-3
sodium cumenesulphonate	239-854-6	15763-76-5	01-2119489411-37	Eye Irrit. 2 (H319)		1-3
cocoamidopropyl betaine hydrogenated	931-333-8 931-513-6 931-296-8	-	01-2119489410-39 01-2119513359-38 01-2119488533-30	Eye Dam. 1 (H318) Aquatic Chronic 3 (H412)		1-3
alkyl alcohol ethoxylate	[4]	68439-46-3	[4]	Acute Tox. 4 (H302) Eye Dam. 1 (H318)		1-3
sodium hydroxide	215-185-5	1310-73-2	01-2119457892-27	Skin Corr. 1A (H314) Met. Corr. 1 (H290)		0.1-1

Specific concentration limits
cocoamidopropyl betaine hydrogenated:
• Eye Dam. 1 (H318) >= 10% > Eye Irrit. 2 (H319) >= 4%
sodium hydroxide:
• Eye Dam. 1 (H318) >= 3% > Eye Irrit. 2 (H319) >= 0.5%
• Skin Corr. 1A (H314) >= 5% > Skin Corr. 1B (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.
[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: Causes severe or permanent damage.
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
Wear eye/face protection. Repeated or prolonged contact:. 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. Absorb with liquid-binding material (sand, diatomite, universal binders, sawdust). 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. Do not breathe spray. 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/m³

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 silicate	-	-	-	0.74
sodium alkylbenzenesulphonate	-	-	-	0.425
sodium cumenesulphonate	-	-	-	3.8
cocoamidopropyl betaine hydrogenated	-	-	-	7.5
alkyl alcohol ethoxylate	-	-	-	-
sodium hydroxide	-	-	-	-

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 silicate	No data available	-	No data available	1.49
sodium alkylbenzenesulphonate	No data available	-	No data available	-
sodium cumenesulphonate	-	-	-	136.25
cocoamidopropyl betaine hydrogenated	No data available	-	No data available	12.5
alkyl alcohol ethoxylate	-	-	-	-
sodium hydroxide	2 %	-	-	-

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 silicate	No data available	-	No data available	0.74
sodium alkylbenzenesulphonate	No data available	-	No data available	-
sodium cumenesulphonate	-	-	-	68.1
cocoamidopropyl betaine hydrogenated	No data available	-	No data available	7.5
alkyl alcohol ethoxylate	-	-	-	-
sodium hydroxide	2 %	-	-	-

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 silicate	-	-	-	6.22
sodium alkylbenzenesulphonate	-	-	-	-
sodium cumenesulphonate	-	-	-	26.9
cocoamidopropyl betaine hydrogenated	-	-	-	44
alkyl alcohol ethoxylate	-	-	-	-
sodium hydroxide	-	-	1	-

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 silicate	-	-	-	1.55
sodium alkylbenzenesulphonate	-	-	-	-
sodium cumenesulphonate	-	-	-	6.6
cocoamidopropyl betaine hydrogenated	-	-	-	13.04
alkyl alcohol ethoxylate	-	-	-	-
sodium hydroxide	-	-	1	-

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 silicate	7.5	1	7.5	1000
sodium alkylbenzenesulphonate	-	-	-	-
sodium cumenesulphonate	0.23	0.023	2.3	100
cocoamidopropyl betaine hydrogenated	0.0135	0.00135	-	3000
alkyl alcohol ethoxylate	-	-	-	-
sodium hydroxide	-	-	-	-

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m³)
sodium silicate	-	-	-	-
sodium alkylbenzenesulphonate	-	-	-	-
sodium cumenesulphonate	0.862	0.0862	0.037	-
cocoamidopropyl betaine hydrogenated	1	0.1	0.8	-
alkyl alcohol ethoxylate	-	-	-	-
sodium hydroxide	-	-	-	-

8.2 Exposure controls

The following information applies for the uses indicated in subsection 1.2 of the Safety Data Sheet.
If available, please refer to the product information sheet for application and handling instructions.
Normal use conditions are assumed for this section.

Recommended safety measures for handling the undiluted product:

Appropriate engineering controls: 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
Automatic application in a dedicated system	AISE_SWED_PW_4_2	PW	PROC 4	480	ERC8a
Manual transfer and dilution	AISE_SWED_PW_8a_1	PW	PROC 8a	60	ERC8a
Automatic transfer and dilution	AISE_SWED_PW_8b_1	PW	PROC 8b	60	ERC8b

Personal protective equipment

Eye / face protection: Safety glasses or goggles (EN 166).

Hand protection: 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: 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): 10

Appropriate engineering controls: Provide a good standard of general ventilation.

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

REACH use scenarios considered for the diluted product:

	SWED	LCS	PROC	Duration (min)	ERC
Manual application by brushing, wiping or mopping	AISE_SWED_PW_10_1	PW	PROC 10	480	ERC8a
Spray application Trigger spray application	AISE_SWED_PW_11_1	PW	PROC 11	60	ERC8a
Manual application	AISE_SWED_PW_19_1	PW	PROC 19	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: Trigger spray bottle application: No special requirements under normal use conditions. Apply technical measures to comply with the occupational exposure limits, if available.

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: 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 silicate	No data available		
sodium alkylbenzenesulphonate	No data available		
sodium cumenesulphonate	No data available		
cocoamidopropyl betaine hydrogenated	100	Method not given	

alkyl alcohol ethoxylate	> 232.2	Method not given	
sodium hydroxide	> 990	Method not given	

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) ISO 4316
Dilution pH: ≈ 11 (10 %) ISO 4316
Kinematic viscosity: Not determined
Solubility in / Miscibility with water: Fully miscible

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
sodium silicate	350	Method not given	20
sodium alkylbenzenesulphonate	No data available		
sodium cumenesulphonate	493 Soluble	Method not given	20
cocoamidopropyl betaine hydrogenated	> .? Soluble	Method not given	20
alkyl alcohol ethoxylate	100 Soluble	Method not given	
sodium hydroxide	1000	Method not given	20

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

Method / remark

Vapour pressure: Not determined See substance data

Substance data, vapour pressure

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
sodium silicate	No data available		
sodium alkylbenzenesulphonate	No data available		
sodium cumenesulphonate	No data available		
cocoamidopropyl betaine hydrogenated	.?	Method not given	20
alkyl alcohol ethoxylate	< 10	Method not given	37.8
sodium hydroxide	< 1330	Method not given	20

Method / remark

Relative density: ≈ 1.10 (20 °C) OECD 109 (EU A.3)
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.
Oxidising properties: Not oxidising.
Corrosion to metals: Not corrosive Weight of evidence

9.2.2 Other safety characteristics
Alkali reserve: ≈ 1.9 (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
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
Result: Not corrosive to skin **Species:** Not applicable **Method:** Episkin

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 silicate	LD_{50}	770 - 820	Mouse	Method not given		Not established
sodium alkylbenzenesulphonate	LD_{50}	> 1470	Rat	OECD 401 (EU B.1)		23000
sodium cumenesulphonate	LD_{50}	> 7000	Rat	Method not given		Not established
cocoamidopropyl betaine hydrogenated	LD_{50}	2335	Rat	Method not given		Not established
alkyl alcohol ethoxylate	LD_{50}	1400	Rat	Weight of evidence		33000
sodium hydroxide		No data available				Not established

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)	ATE (mg/kg)
sodium silicate		No data available				Not established
sodium alkylbenzenesulphonate		No data available				Not established
sodium cumenesulphonate	LD_{50}	> 2000	Rabbit	Method not given		Not established
cocoamidopropyl betaine hydrogenated	LD_{50}	> 5000	Rat	OECD 402 (EU B.3)		Not established
alkyl alcohol ethoxylate	LD_{50}	2000 - 5000	Rat	Weight of evidence		Not established
sodium hydroxide	LD_{50}	1350	Rabbit	Method not given		Not established

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium silicate		No data available			
sodium alkylbenzenesulphonate		No data available			
sodium cumenesulphonate	LC_{50}	> 5 (mist) No mortality observed	Rat	Read across	3.87
cocoamidopropyl betaine hydrogenated	LC_{50}	> 5 (mist)	Rat	Method not given	4
alkyl alcohol ethoxylate		No data available			
sodium hydroxide		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 silicate	Not established	Not established	Not established	Not established
sodium alkylbenzenesulphonate	Not established	Not established	Not established	Not established
sodium cumenesulphonate	Not established	Not established	Not established	Not established
cocoamidopropyl betaine hydrogenated	Not established	Not established	Not established	Not established

alkyl alcohol ethoxylate	Not established	Not established	Not established	Not established
sodium hydroxide	Not established	Not established	Not established	Not established

Irritation and corrosivity

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium silicate	Corrosive		Method not given	
sodium alkylbenzenesulphonate	No data available			
sodium cumenesulphonate	Not irritant	Rabbit	OECD 404 (EU B.4)	
cocoamidopropyl betaine hydrogenated	Mild irritant	Rabbit	OECD 404 (EU B.4)	
alkyl alcohol ethoxylate	Not irritant		Weight of evidence	
sodium hydroxide	Corrosive	Rabbit	Method not given	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium silicate	Corrosive		Method not given	
sodium alkylbenzenesulphonate	No data available			
sodium cumenesulphonate	Irritant	Rabbit	OECD 405 (EU B.5)	
cocoamidopropyl betaine hydrogenated	Severe damage	Rabbit	OECD 405 (EU B.5)	
alkyl alcohol ethoxylate	Severe damage	Rabbit	Weight of evidence OECD 437	
sodium hydroxide	Corrosive	Rabbit	Method not given	

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium silicate	No data available			
sodium alkylbenzenesulphonate	No data available			
sodium cumenesulphonate	No data available			
cocoamidopropyl betaine hydrogenated	No data available			
alkyl alcohol ethoxylate	No data available			
sodium hydroxide	No data available			

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
sodium silicate	No data available			
sodium alkylbenzenesulphonate	No data available			
sodium cumenesulphonate	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	
cocoamidopropyl betaine hydrogenated	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	
alkyl alcohol ethoxylate	Not sensitising		Weight of evidence	
sodium hydroxide	Not sensitising		Human repeated patch test	

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
sodium silicate	No data available			
sodium alkylbenzenesulphonate	No data available			
sodium cumenesulphonate	No data available			
cocoamidopropyl betaine hydrogenated	No data available			
alkyl alcohol ethoxylate	No data available			
sodium hydroxide	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 silicate	No data available		No data available	
sodium alkylbenzenesulphonate	No data available		No data available	
sodium cumenesulphonate	No evidence for mutagenicity, negative test results	Method not given	No evidence for mutagenicity, negative test results	OECD 474 (EU B.12)
cocoamidopropyl betaine hydrogenated	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13) OECD 476	No evidence for mutagenicity, negative test results	OECD 474 (EU B.12)
alkyl alcohol ethoxylate	No evidence for mutagenicity, negative test results	OECD 473	No data available	

sodium hydroxide	No evidence for mutagenicity, negative test results	DNA repair test on rat hepatocytes OECD 473	No evidence for mutagenicity, negative test results	OECD 474 (EU B.12) OECD 475 (EU B.11)

Carcinogenicity

Ingredient(s)	Effect
sodium silicate	No data available
sodium alkylbenzenesulphonate	No data available
sodium cumenesulphonate	No evidence for carcinogenicity, negative test results
cocoamidopropyl betaine hydrogenated	No evidence for carcinogenicity, weight-of-evidence
alkyl alcohol ethoxylate	No evidence for carcinogenicity, negative test results
sodium hydroxide	No evidence for carcinogenicity, weight-of-evidence

Toxicity for reproduction

Ingredient(s)	Endpoint	Specific effect	Value (mg/kg bw/d)	Species	Method	Exposure time	Remarks and other effects reported
sodium silicate			No data available				
sodium alkylbenzenesulphonate			No data available				
sodium cumenesulphonate	NOAEL	Teratogenic effects	> 936	Rat	Non guideline test		No known significant effects or critical hazards
cocoamidopropyl betaine hydrogenated	NOEL	Developmental toxicity	300	Rat	OECD 414 (EU B.31), oral		
alkyl alcohol ethoxylate	NOAEL		> 250	Rat	Not known		No effects on fertility No developmental toxicity
sodium hydroxide			No data available				No evidence for developmental toxicity 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 silicate	NOAEL	> 227 - 237	Rat	Method not given		
sodium alkylbenzenesulphonate		No data available				
sodium cumenesulphonate	NOAEL	763 - 3534	Rat	OECD 408 (EU B.26)		No effects observed
cocoamidopropyl betaine hydrogenated	NOAEL	300	Rat	OECD 408 (EU B.26)	90	
alkyl alcohol ethoxylate	NOAEL	80 - 400		OECD 408 (EU B.26)		
sodium hydroxide		No data available				

Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
sodium silicate		No data available				
sodium alkylbenzenesulphonate		No data available				
sodium cumenesulphonate		No data available				
cocoamidopropyl betaine hydrogenated		No data available				
alkyl alcohol ethoxylate	NOAEL	80		OECD 411 (EU B.28)	90	
sodium hydroxide		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 silicate		No data available				
sodium alkylbenzenesulphonate		No data available				
sodium cumenesulphonate		No data available				
cocoamidopropyl betaine hydrogenated		No data available				

alkyl alcohol ethoxylate		No data available				
sodium hydroxide		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 silicate			No data available					
sodium alkylbenzenesulphonate			No data available					
sodium cumenesulphonate			No data available					
cocoamidopropyl betaine hydrogenated			No data available					
alkyl alcohol ethoxylate			No data available					
sodium hydroxide			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
sodium silicate	No data available
sodium alkylbenzenesulphonate	No data available
sodium cumenesulphonate	Not applicable
cocoamidopropyl betaine hydrogenated	No data available
alkyl alcohol ethoxylate	No data available
sodium hydroxide	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
sodium silicate	No data available
sodium alkylbenzenesulphonate	No data available
sodium cumenesulphonate	Not applicable
cocoamidopropyl betaine hydrogenated	No data available
alkyl alcohol ethoxylate	No data available
sodium hydroxide	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 silicate	LC_{50}	210	*Brachydanio rerio*	Method not given	96
sodium alkylbenzenesulphonate	LC_{50}	No data available			
sodium cumenesulphonate	LC_{50}	> 1000	*Fish*	EPA-OPPTS 850.1075	96
cocoamidopropyl betaine hydrogenated	LC_{50}	1.11	*Fish*	OECD 203, semi-static	96
alkyl alcohol ethoxylate	LC_{50}	5 - 7	*Fish*	92/69/EEC, C1,	96

				semi-static	
sodium hydroxide	LC_{50}	35	*Various species*	Method not given	96

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium silicate	EC_{50}	1700	*Daphnia*	Method not given	48
sodium alkylbenzenesulphonate	EC_{50}	1.62	*Daphnia magna Straus*		48
sodium cumenesulphonate	EC_{50}	> 1000	*Daphnia magna Straus*	OECD 202 (EU C.2)	48
cocoamidopropyl betaine hydrogenated	EC_{50}	1.9	*Daphnia*	OECD 202, static	48
alkyl alcohol ethoxylate	EC_{50}	5.3	*Daphnia*	92/69/EEC	48
sodium hydroxide	EC_{50}	40.4	*Ceriodaphnia sp.*	Method not given	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium silicate	EC_{50}	207	*Chlorella pyrenoidosa*	Method not given	72
sodium alkylbenzenesulphonate	EC_{50}	29	*Selenastrum capricornutum*		96
sodium cumenesulphonate	$E_b C_{50}$	> 230	*Not specified*	EPA OPPTS 850.5400	96
cocoamidopropyl betaine hydrogenated	$E_r C_{50}$	2.4	*Not specified*	Method not given	72
alkyl alcohol ethoxylate	EC_{50}	1.4 - 47	*Not specified*	92/69/EEC	72
sodium hydroxide	EC_{50}	22	*Photobacterium phosphoreum*	Method not given	0.25

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
sodium silicate		No data available			
sodium alkylbenzenesulphonate		No data available			
sodium cumenesulphonate		No data available			
cocoamidopropyl betaine hydrogenated	ErC_{50}	0.74	*Skeletonema costatum Phaeodactylum tricornutum*	ISO 10253	72
alkyl alcohol ethoxylate		No data available			
sodium hydroxide		No data available			

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
sodium silicate	EC_{50}	> 100	*Activated sludge*	Method not given	3 hour(s)
sodium alkylbenzenesulphonate		No data available			
sodium cumenesulphonate	$E_r C_{50}$	> 1000	*Bacteria*	OECD 209	3 hour(s)
cocoamidopropyl betaine hydrogenated	EC_{50}	3000	*Bacteria*	ISO 13641 (2003), anaerobic	16 hour(s)
alkyl alcohol ethoxylate	EC_{50}	> 140	*Bacteria*	DIN EN ISO 8192-OECD 209-88/302/EEC	3 hour(s)
sodium hydroxide		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 silicate		No data available				
sodium alkylbenzenesulphonate		No data available				
sodium cumenesulphonate		No data available				
cocoamidopropyl betaine hydrogenated	NOEC	0.135	*Oncorhynchus*	OECD 210	37 day(s)	

			mykiss			
alkyl alcohol ethoxylate	EC_{10}	8.983	*Not specified*	Method not given	21 day(s)	
sodium hydroxide		No data available				

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
sodium silicate		No data available				
sodium alkylbenzenesulphonate		No data available				
sodium cumenesulphonate		No data available				
cocoamidopropyl betaine hydrogenated	NOEC	0.3	*Daphnia magna*	OECD 211	21 day(s)	
alkyl alcohol ethoxylate	EC_{10}	2.579	*Daphnia sp.*	Method not given	21 day(s)	
sodium hydroxide		No data available				

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

Ingredient(s)	Endpoint	Value (mg/kg dw sediment)	Species	Method	Exposure time (days)	Effects observed
sodium silicate		No data available				
sodium alkylbenzenesulphonate		No data available				
sodium cumenesulphonate		No data available				
cocoamidopropyl betaine hydrogenated		No data available				
alkyl alcohol ethoxylate		No data available				
sodium hydroxide		No data available				

Terrestrial toxicity

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

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
cocoamidopropyl betaine hydrogenated	NOEC	≥ 846	*Eisenia fetida*		14	
sodium hydroxide		No data available				

Terrestrial toxicity - plants, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
cocoamidopropyl betaine hydrogenated	NOEC	84.6	*Brassica alba Lepidium sativum Triticum aestivum*	OECD 208	17	
sodium hydroxide		No data available				

Terrestrial toxicity - birds, if available:

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

Terrestrial toxicity - beneficial insects, if available:

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

Terrestrial toxicity - soil bacteria, if available:

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

		soil)				
sodium hydroxide		No data available				

12.2 Persistence and degradability

Abiotic degradation

Abiotic degradation - photodegradation in air, if available:

Ingredient(s)	Half-life time	Method	Evaluation	Remark
sodium hydroxide	13 second(s)	Method not given	Rapidly photodegradable	

Abiotic degradation - hydrolysis, if available:

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

Abiotic degradation - other processes, if available:

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

Biodegradation

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT_{50}	Method	Evaluation
sodium silicate					Not applicable (inorganic substance)
sodium alkylbenzenesulphonate				OECD 301B	Readily biodegradable
sodium cumenesulphonate		CO_2 production	103 - 109% in 28 day(s)	OECD 301B	Readily biodegradable
cocoamidopropyl betaine hydrogenated	Activated sludge, aerobe	CO_2 production	91.6 % in 28 day(s)	OECD 301B	Readily biodegradable
alkyl alcohol ethoxylate				OECD 301B	Readily biodegradable
sodium hydroxide					Not applicable (inorganic substance)

Ready biodegradability - anaerobic and marine conditions, if available:

Ingredient(s)	Medium & Type	Analytical method	DT_{50}	Method	Evaluation
cocoamidopropyl betaine hydrogenated			76% in 28 day(s)	OECD 306	Readily biodegradable
sodium hydroxide					No data available

Degradation in relevant environmental compartments, if available:

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

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
sodium silicate	No data available			
sodium alkylbenzenesulphonate	No data available			
sodium cumenesulphonate	-1.1	Method not given	No bioaccumulation expected	
cocoamidopropyl betaine hydrogenated	4.2	Method not given	Low potential for bioaccumulation	
alkyl alcohol ethoxylate	3.11 - 4.19	Method not given	High potential for bioaccumulation	
sodium hydroxide	No data available		Not relevant, does not bioaccumulate	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
sodium silicate	No data available				
sodium alkylbenzenesulphonate	No data available				
sodium cumenesulphonate	No data available				
cocoamidopropyl betaine hydrogenated	71		QSAR	Low potential for bioaccumulation	
alkyl alcohol ethoxylate	< 500		Method not given	High potential for bioaccumulation	
sodium hydroxide	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 silicate	No data available				
sodium alkylbenzenesulphonate	No data available				
sodium cumenesulphonate	No data available				
cocoamidopropyl betaine hydrogenated	2.0-5.1		QSAR		Potential for mobility in soil, soluble in water
alkyl alcohol ethoxylate	No data available				Potential for mobility in soil, soluble in water
sodium hydroxide	No data available				Mobile in soil

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.

European Waste Catalogue: 20 01 29* - detergents containing dangerous substances.

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: 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

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

phosphates	5 - 15 %
anionic surfactants, amphoteric surfactants, non-ionic surfactants	< 5 %

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) 648/2004 on detergents (UK amended). Data to support this assertion are held at the disposal of the competent authorities of the UK and will be made available to them, at their direct request or at the request of a detergent manufacturer.

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

SDS code: MSDS4717 **Version:** 04.0 **Revision:** 2022-06-19

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):, 1, 2, 3, 4, 6, 7, 8, 9, 11, 12, 15, 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:
• H290 - May be corrosive to metals.
• H302 - Harmful if swallowed.
• H314 - Causes severe skin burns and eye damage.
• 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
• PROC - Process categories
• REACH number - REACH registration number, without supplier specific part
• vPvB - very Persistent and very Bioaccumulative

End of Safety Data Sheet