



Suma Break up D3.5 JFlex

Revision: 2018-01-25

Version: 03.2

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

1.1 Product identifier

Trade name: Suma Break up D3.5 JFlex

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

Identified uses:

For professional use only.

AISE-P303 - Kitchen cleaner. Manual process

AISE-P304 - Kitchen cleaner. Spray and wipe manual process

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

1.3 Details of the supplier of the safety data sheet

Diversey Europe Operations BV, Maarssebroeksedijk 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

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 disodium metasilicate (Sodium Metasilicate), sodium alkylbenzenesulphonate (Sodium Dodecylbenzenesulfonate), alkyl alcohol ethoxylate (C9-11 Pareth-6), cocoamidopropyl betaine hydrogenated (Cocamidopropyl Betaine).

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

The product does not meet the criteria for PBT or vPvB in accordance with Regulation (EC) No 1907/2006, Annex XIII

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Suma Break up D3.5 JFlex

Ingredient(s)	EC number	CAS number	REACH number	Classification	Notes	Weight percent
disodium metasilicate	215-687-4	1344-09-8	01-2119448725-31	Skin Corr. 1B (H314) STOT SE 3 (H335) 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. 2A (H319)		1-3
alkyl alcohol ethoxylate	Polymer*	68439-46-3	[4]	Acute Tox. 4 (H302) Eye Dam. 1 (H318) Aquatic Chronic 3 (H412)		1-3
cocoamidopropyl betaine hydrogenated	604-575-4 931-513-6 931-296-8	-	01-2119489410-39 01-2119513359-38 01-2119488533-30	Eye Dam. 1 (H318) Aquatic Chronic 3 (H412)		1-3

* Polymer.

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

[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.

[2] Exempted: included in Annex IV of Regulation (EC) No 1907/2006.

[3] Exempted: Annex V of Regulation (EC) No 1907/2006.

[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. Take off immediately all contaminated clothing and wash it before re-use. If skin irritation occurs: Get medical advice or attention.

Eye contact:

Immediately rinse eyes cautiously with lukewarm water for several 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. 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.

6.2 Environmental precautions

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

6.3 Methods and material for containment and cleaning up

Absorb with liquid-binding material (sand, diatomite, universal binders, sawdust).

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

Suma Break up D3.5 JFlex

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. Wash face, hands and any exposed skin thoroughly after handling. Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. Use personal protective equipment as required. Avoid contact with eyes. Use only with adequate ventilation.

7.2 Conditions for safe storage, including any incompatibilities

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

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 oral exposure - Consumer (mg/kg bw)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
disodium metasilicate	-	-	-	0.74
sodium alkylbenzenesulphonate	No data available	No data available	No data available	No data available
sodium cumenesulphonate	-	-	-	3.8
alkyl alcohol ethoxylate	-	-	-	-
cocoamidopropyl betaine hydrogenated	-	-	-	7.5

DNEL 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)
disodium metasilicate	No data available	-	No data available	1.49
sodium alkylbenzenesulphonate	No data available	No data available	No data available	No data available
sodium cumenesulphonate	-	-	-	7.6
alkyl alcohol ethoxylate	-	-	-	-
cocoamidopropyl betaine hydrogenated	No data available	-	No data available	12.5

DNEL 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)
disodium metasilicate	No data available	-	No data available	0.74
sodium alkylbenzenesulphonate	No data available	No data available	No data available	No data available
sodium cumenesulphonate	-	-	-	3.8
alkyl alcohol ethoxylate	-	-	-	-
cocoamidopropyl betaine hydrogenated	No data available	-	No data available	7.5

DNEL inhalatory exposure - Worker (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
disodium metasilicate	-	-	-	6.22
sodium alkylbenzenesulphonate	No data available	No data available	No data available	No data available
sodium cumenesulphonate	-	-	-	3.8
alkyl alcohol ethoxylate	-	-	-	-
cocoamidopropyl betaine hydrogenated	-	-	-	44

DNEL inhalatory exposure - Consumer (mg/m³)

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

Suma Break up D3.5 JFlex

disodium metasilicate	-	-	-	1.55
sodium alkylbenzenesulphonate	No data available	No data available	No data available	No data available
sodium cumenesulphonate	-	-	-	13.2
alkyl alcohol ethoxylate	-	-	-	-
cocoamidopropyl betaine hydrogenated	-	-	-	-

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)
disodium metasilicate	7.5	1	7.5	1000
sodium alkylbenzenesulphonate	No data available	No data available	No data available	No data available
sodium cumenesulphonate	0.23	-	2.3	100
alkyl alcohol ethoxylate	-	-	-	-
cocoamidopropyl betaine hydrogenated	0.0135	0.00135	-	3000

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m ³)
disodium metasilicate	-	-	-	-
sodium alkylbenzenesulphonate	No data available	No data available	No data available	No data available
sodium cumenesulphonate	-	-	-	-
alkyl alcohol ethoxylate	-	-	-	-
cocoamidopropyl betaine hydrogenated	1	0.1	0.8	-

8.2 Exposure controls

The following information applies for the uses indicated in subsection 1.2 of the Safety Data Sheet.

If available, please refer to the product information sheet for application and handling instructions.

Normal use conditions are assumed for this section.

Recommended safety measures for handling the undiluted product:

Covering activities such as filling and transfer of product to application equipment, flasks or buckets

Appropriate engineering controls: If the product is diluted by using specific dosing systems with no risk of splashes or direct skin contact, the personal protection equipment as described in this section is not required.

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

Personal protective equipment**Eye / face protection:**

Safety glasses or goggles (EN 166).

Hand protection:

Chemical-resistant protective gloves (EN 374). Verify instructions regarding permeability and breakthrough time, as provided by the gloves supplier. Consider specific local use conditions, such as risk of splashes, cuts, contact time and temperature.

Suggested gloves for prolonged contact: Material: butyl rubber Penetration time: \geq 480 min

Material thickness: \geq 0.7 mm

Suggested gloves for protection against splashes: Material: nitrile rubber Penetration time: \geq 30 min Material thickness: \geq 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 (%): 3

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

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

Personal protective equipment**Eye / face protection:**

Safety glasses are not normally required. However, their use is recommended in those cases where splashes may occur when handling the product.

Hand protection:

Rinse and dry hands after use. For prolonged contact protection for the skin may be necessary.

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**

Suma Break up D3.5 JFlex

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, Yellow

Odour: Product specific

Odour threshold: Not applicable

pH: > 12 (neat)

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

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

Not relevant to classification of this product

Substance data, boiling point

Ingredient(s)	Value (°C)	Method	Atmospheric pressure (hPa)
disodium metasilicate	No data available		
sodium alkylbenzenesulphonate	No data available		
sodium cumenesulphonate	No data available		
alkyl alcohol ethoxylate	> 232.2	Method not given	
cocoamidopropyl betaine hydrogenated	100	Method not given	

Method / remark

Flash point (°C): Not applicable.

Sustained combustion: Not applicable.

(UN Manual of Tests and Criteria, section 32, L.2)

Evaporation rate: Not determined

Flammability (solid, gas): Not applicable to liquids

Upper/lower flammability limit (%): Not determined

Substance data, flammability or explosive limits, if available:

Method / remark

Vapour pressure: Not determined

Substance data, vapour pressure

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

Method / remark

Vapour density: Not determined

Relative density: ≈ 1.10 (20 °C)

Solubility in / Miscibility with Water: Fully miscible

Substance data, solubility in water

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

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

Method / remark

Autoignition temperature: Not determined

Decomposition temperature: Not applicable.

Viscosity: Not determined

Explosive properties: Not explosive.

Oxidising properties: Not oxidising.

9.2 Other information

Surface tension (N/m): Not determined

Corrosion to metals: Not corrosive

Not relevant to classification of this product

Weight of evidence

Substance data, dissociation constant, if available:

SECTION 10: Stability and reactivity

Suma Break up D3.5 JFlex

10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability

Stable under normal storage and use conditions.

10.3 Possibility of hazardous reactions

No hazardous reactions known under normal storage and use conditions.

10.4 Conditions to avoid

None known under normal storage and use conditions.

10.5 Incompatible materials

Reacts with acids.

10.6 Hazardous decomposition products

None known under normal storage and use conditions.

SECTION 11: Toxicological information**11.1 Information on toxicological effects**

Mixture data:

Relevant calculated ATE(s):

ATE - Oral (mg/kg): >5000

Skin irritation and corrosivity

Result: Not corrosive

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)
disodium metasilicate	LD ₅₀	770 - 820	Mouse	Method not given	
sodium alkylbenzenesulphonate		No data available			
sodium cumenesulphonate	LD ₅₀	> 7000	Rat	Method not given	
alkyl alcohol ethoxylate	LD ₅₀	300 - 2000		Method not given	
cocoamidopropyl betaine hydrogenated	LD ₅₀	2430	Rat	Method not given	

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
disodium metasilicate		No data available			
sodium alkylbenzenesulphonate		No data available			
sodium cumenesulphonate	LD ₅₀	> 2000	Rabbit	Method not given	
alkyl alcohol ethoxylate	LD ₅₀	2000 - 5000	Rat	Method not given	
cocoamidopropyl betaine hydrogenated	LD ₅₀	> 5000	Rat	OECD 402 (EU B.3)	

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
disodium metasilicate		No data available			
sodium alkylbenzenesulphonate		No data available			
sodium cumenesulphonate	LC ₅₀	> 5 (mist) No mortality observed	Rat	Read across	3.87
alkyl alcohol ethoxylate		No data available			
cocoamidopropyl betaine hydrogenated	LC ₅₀	> 5 (mist)	Rat	Method not given	4

Irritation and corrosivity

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
disodium metasilicate	Corrosive		Method not given	
sodium alkylbenzenesulphonate	No data available			

sodium cumenesulphonate	Not irritant	Rabbit	OECD 404 (EU B.4)	
alkyl alcohol ethoxylate	Not irritant		Method not given	
cocoamidopropyl betaine hydrogenated	Not irritant	Rabbit	OECD 404 (EU B.4)	

Eye irritation and corrosivity

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

Respiratory tract irritation and corrosivity

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

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
disodium metasilicate	No data available			
sodium alkylbenzenesulphonate	No data available			
sodium cumenesulphonate	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	
alkyl alcohol ethoxylate	Not sensitising	Guinea pig	Method not given	
cocoamidopropyl betaine hydrogenated	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
disodium metasilicate	No data available			
sodium alkylbenzenesulphonate	No data available			
sodium cumenesulphonate	No data available			
alkyl alcohol ethoxylate	No data available			
cocoamidopropyl betaine hydrogenated	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)
disodium metasilicate	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)
alkyl alcohol ethoxylate	No evidence for mutagenicity, negative test results	OECD 473	No data available	
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)

Carcinogenicity

Ingredient(s)	Effect
disodium metasilicate	No data available
sodium alkylbenzenesulphonate	No data available
sodium cumenesulphonate	No evidence for carcinogenicity, negative test results
alkyl alcohol ethoxylate	No evidence for carcinogenicity, negative test results
cocoamidopropyl betaine hydrogenated	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
disodium metasilicate			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
alkyl alcohol ethoxylate	NOAEL		> 250	Rat	Not known		No effects on fertility No developmental toxicity

Suma Break up D3.5 JFlex

cocoamidopropyl betaine hydrogenated	NOEL	Developmental toxicity	300	Rat	OECD 414 (EU B.31), oral		
--------------------------------------	------	------------------------	-----	-----	--------------------------	--	--

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
disodium metasilicate	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
alkyl alcohol ethoxylate	NOAEL	80 - 400		Method not given		
cocoamidopropyl betaine hydrogenated	NOAEL	300	Rat	OECD 408 (EU B.26)	90	

Sub-chronic dermal toxicity

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

STOT-single exposure

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

STOT-repeated exposure

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

Aspiration hazard

Suma Break up D3.5 JFlex

Substances with an aspiration hazard (H304), if any, are listed in section 3. If relevant, see section 9 for dynamic viscosity and relative density of the product.

Potential adverse health effects and symptoms

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

SECTION 12: Ecological information**12.1 Toxicity**

No data is available on the mixture.

Substance data, where relevant and available, are listed below:

Aquatic short-term toxicity

Aquatic short-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
disodium metasilicate	LC ₅₀	210	<i>Brachydanio rerio</i>	Method not given	96
sodium alkylbenzenesulphonate		No data available			
sodium cumenesulphonate	LC ₅₀	> 1000	<i>Fish</i>	EPA-OPPTS 850.1075	96
alkyl alcohol ethoxylate	LC ₅₀	5 - 7	<i>Fish</i>	92/69/EEC, C1, semi-static	96
cocoamidopropyl betaine hydrogenated	LC ₅₀	1.11	<i>Fish</i>	OECD 203, semi-static	96

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
disodium metasilicate	EC ₅₀	1700	<i>Daphnia</i>	Method not given	48
sodium alkylbenzenesulphonate		No data available			
sodium cumenesulphonate	EC ₅₀	> 100	<i>Daphnia magna Straus</i>	OECD 202 (EU C.2)	48
alkyl alcohol ethoxylate	EC ₅₀	5.3	<i>Daphnia</i>	92/69/EEC	48
cocoamidopropyl betaine hydrogenated	EC ₅₀	1.9	<i>Daphnia</i>	OECD 202, static	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
disodium metasilicate	EC ₅₀	207	<i>Chlorella pyrenoidosa</i>	Method not given	72
sodium alkylbenzenesulphonate		No data available			
sodium cumenesulphonate	EC ₅₀	> 230	<i>Not specified</i>	EPA OPPTS 850.5400	96
alkyl alcohol ethoxylate	EC ₅₀	1.4 - 47	<i>Not specified</i>	92/69/EEC	72
cocoamidopropyl betaine hydrogenated	E _r C ₅₀	2.4	<i>Not specified</i>	Method not given	72

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
disodium metasilicate		No data available			-
sodium alkylbenzenesulphonate		No data available			
sodium cumenesulphonate		No data available			-
alkyl alcohol ethoxylate		No data available			-
cocoamidopropyl betaine hydrogenated	ErC ₅₀	0.74	<i>Skeletonema costatum</i> <i>Phaeodactylum tricornutum</i>	ISO 10253	72

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
disodium metasilicate	EC ₅₀	> 100	<i>Activated sludge</i>	Method not given	3 hour(s)
sodium alkylbenzenesulphonate		No data available			
sodium cumenesulphonate	E _r C ₅₀	> 1000	<i>Bacteria</i>	OECD 209	3 hour(s)
alkyl alcohol ethoxylate	EC ₅₀	> 140	<i>Bacteria</i>	Method not given	3 hour(s)
cocoamidopropyl betaine hydrogenated	EC ₅₀	3000	<i>Bacteria</i>	ISO 13641 (2003), anaerobic	16 hour(s)

Suma Break up D3.5 JFlex

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
disodium metasilicate		No data available				
sodium alkylbenzenesulphonate		No data available				
sodium cumenesulphonate		No data available				
alkyl alcohol ethoxylate	EC ₁₀	8.983	<i>Not specified</i>	Method not given	21 day(s)	
cocoamidopropyl betaine hydrogenated	NOEC	0.135	<i>Oncorhynchus mykiss</i>	OECD 210	100 day(s)	

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
disodium metasilicate		No data available				
sodium alkylbenzenesulphonate		No data available				
sodium cumenesulphonate		No data available				
alkyl alcohol ethoxylate	EC ₁₀	2.579	<i>Daphnia sp.</i>	Method not given	21 day(s)	
cocoamidopropyl betaine hydrogenated	NOEC	0.3	<i>Daphnia magna</i>	OECD 211	21 day(s)	

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
disodium metasilicate		No data available			-	
sodium alkylbenzenesulphonate		No data available				
sodium cumenesulphonate		No data available			-	
alkyl alcohol ethoxylate		No data available			-	
cocoamidopropyl betaine hydrogenated		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
disodium metasilicate		No data available			-	
sodium cumenesulphonate		No data available			-	
alkyl alcohol ethoxylate		No data available			-	
cocoamidopropyl betaine hydrogenated		No data available			-	

Terrestrial toxicity - plants, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
disodium metasilicate		No data available			-	
sodium cumenesulphonate		No data available			-	
alkyl alcohol ethoxylate		No data available			-	
cocoamidopropyl betaine hydrogenated		No data available			-	

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
disodium metasilicate		No data available			-	
sodium cumenesulphonate		No data available			-	
alkyl alcohol ethoxylate		No data available			-	
cocoamidopropyl betaine hydrogenated		No data available			-	

Suma Break up D3.5 JFlex

Terrestrial toxicity - beneficial insects, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
disodium metasilicate		No data available			-	
sodium cumenesulphonate		No data available			-	
alkyl alcohol ethoxylate		No data available			-	
cocoamidopropyl betaine hydrogenated		No data available			-	

Terrestrial toxicity - soil bacteria, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
disodium metasilicate		No data available			-	
sodium cumenesulphonate		No data available			-	
alkyl alcohol ethoxylate		No data available			-	
cocoamidopropyl betaine hydrogenated		No data available			-	

12.2 Persistence and degradability**Abiotic degradation**

Abiotic degradation - photodegradation in air, if available:

Abiotic degradation - hydrolysis, if available:

Abiotic degradation - other processes, if available:

Biodegradation

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT ₅₀	Method	Evaluation
disodium metasilicate					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
alkyl alcohol ethoxylate			60 % in 28 day(s)	Method not given	Readily biodegradable
cocoamidopropyl betaine hydrogenated			95 % in 28 day(s)	Method not given	Readily biodegradable

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

Degradation in relevant environmental compartments, if available:

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
disodium metasilicate	No data available			
sodium alkylbenzenesulphonate	No data available			
sodium cumenesulphonate	-1.1	Method not given	No bioaccumulation expected	
alkyl alcohol ethoxylate	3.11 - 4.19	Method not given	High potential for bioaccumulation	
cocoamidopropyl betaine hydrogenated	4.2	Method not given	Low potential for bioaccumulation	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
disodium metasilicate	No data available				
sodium alkylbenzenesulphonate	No data available				
sodium cumenesulphonate	No data available				
alkyl alcohol ethoxylate	< 500		Method not given	High potential for bioaccumulation	
cocoamidopropyl betaine hydrogenated	3 - 71		Method not given	Low potential for bioaccumulation	

12.4 Mobility in soil

Adsorption/Desorption to soil or sediment

Suma Break up D3.5 JFlex

Ingredient(s)	Adsorption coefficient Log Koc	Desorption coefficient Log Koc(des)	Method	Soil/sediment type	Evaluation
disodium metasilicate	No data available				
sodium alkylbenzenesulphonate	No data available				
sodium cumenesulphonate	No data available				
alkyl alcohol ethoxylate	No data available				Potential for mobility in soil, soluble in water
cocoamidopropyl betaine hydrogenated	No data available				Potential for mobility in soil, soluble in water

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 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

Class: -

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 1272/2008 - CLP
- Regulation (EC) No. 1907/2006 - REACH
- Regulation (EC) No. 648/2004 - Detergents regulation

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 %

amphoteric surfactants, anionic surfactants, non-ionic surfactants

< 5 %

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.

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: 03.2

Revision: 2018-01-25

Reason for revision:

This data sheet contains changes from the previous version in section(s):, 2, 3, 16

Suma Break up D3.5 JFlex**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
- DNEL - Derived No Effect Limit
- EUH - CLP Specific hazard statement
- PBT - Persistent, Bioaccumulative and Toxic
- PNEC - Predicted No Effect Concentration
- REACH number - REACH registration number, without supplier specific part
- vPvB - very Persistent and very Bioaccumulative
- ATE - Acute Toxicity Estimate

End of Safety Data Sheet