



## Suma Break up D3.5

Revision: 2019-05-19

Version: 01.2

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

#### 1.1 Product identifier

**Trade name:** Suma Break up D3.5

#### 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 Hygiene Sales Limited

Jamestown Road, Finglas, Dublin 11, Ireland

Tel: 01 8081808 (9am - 5pm Mon-Fri)

Email: dublin.orders@diversev.com

#### 1.4 Emergency telephone number

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

National Poisons Information Centre

Tel: 01 809 2166. (8.00 a.m. to 10.00 p.m. 7 days a week)

Tel: 01 809 2566 (health care professionals)

### 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

## Suma Break up D3.5

## 3.2 Mixtures

Ingredient(s)	EC number	CAS #	REACH number	Classification	Notes	Weight percent
disodium metasilicate	215-687-4	[1]	[1]	Skin Corr. 1B (H314) STOT SE 3 (H335) Met. Corr. 1 (H290)		3-10
sodium alkylbenzenesulphonate	290-656-6	[1]	[1]	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318)		1-3
sodium cumenesulphonate	239-854-6	-	01-2119489411-37	Eye Irrit. 2 (H319)		1-3
alkyl alcohol ethoxylate	[4]	68439-46-3	[4]	Acute Tox. 4 (H302) Eye Dam. 1 (H318)		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
sodium hydroxide	215-185-5	1310-73-2	01-2119457892-27	Skin Corr. 1A (H314) Met. Corr. 1 (H290)		0.1-1

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.

[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

<b>Inhalation:</b>	Get medical attention or advice if you feel unwell.
<b>Skin contact:</b>	Take off immediately all contaminated clothing and wash it before re-use.
<b>Eye contact:</b>	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.
<b>Ingestion:</b>	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.
<b>Self-protection of first aider:</b>	Consider personal protective equipment as indicated in subsection 8.2.

### 4.2 Most important symptoms and effects, both acute and delayed

<b>Inhalation:</b>	No known effects or symptoms in normal use.
<b>Skin contact:</b>	Causes irritation.
<b>Eye contact:</b>	Causes severe or permanent damage.
<b>Ingestion:</b>	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

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

## Suma Break up D3.5

**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 face, hands and any exposed skin thoroughly after handling. Take off contaminated clothing. Wash contaminated clothing before reuse. Avoid contact with eyes. Use only with adequate ventilation. See chapter 8.2, Exposure controls / Personal protection.

**7.2 Conditions for safe storage, including any incompatibilities**

Store in accordance with local and national regulations. Store in a closed container. Keep only in original packaging. For conditions to avoid see subsection 10.4. For incompatible materials see subsection 10.5.

**7.3 Specific end use(s)**

No specific advice for end use available.

**SECTION 8: Exposure controls/personal protection****8.1 Control parameters****Workplace exposure limits**

Air limit values, if available:

Ingredient(s)	Long term value(s)	Short term value(s)
sodium hydroxide		2 mg/m <sup>3</sup>

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	No data available	No data available	No data available	3.8
alkyl alcohol ethoxylate	-	-	-	-
cocoamidopropyl betaine hydrogenated	-	-	-	7.5
sodium hydroxide	-	-	-	-

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	No data available	No data available	No data available	7.6
alkyl alcohol ethoxylate	-	-	-	-
cocoamidopropyl betaine hydrogenated	No data available	-	No data available	12.5
sodium hydroxide	2 %	-	-	-

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	No data available	No data available	No data available	3.8
alkyl alcohol ethoxylate	-	-	-	-
cocoamidopropyl betaine hydrogenated	No data available	-	No data available	7.5
sodium hydroxide	2 %	-	-	-

DNEL inhalatory exposure - Worker (mg/m<sup>3</sup>)

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	No data available	No data available	No data available	53.6

## Suma Break up D3.5

alkyl alcohol ethoxylate	-	-	-	-
cocoamidopropyl betaine hydrogenated	-	-	-	44
sodium hydroxide	-	-	1	-

DNEL inhalatory exposure - Consumer (mg/m<sup>3</sup>)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
disodium metasilicate	-	-	-	1.55
sodium alkylbenzenesulphonate	No data available	No data available	No data available	No data available
sodium cumenesulphonate	No data available	No data available	No data available	13.2
alkyl alcohol ethoxylate	-	-	-	-
cocoamidopropyl betaine hydrogenated	-	-	-	13.04
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)
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	0.023	2.3	100
alkyl alcohol ethoxylate	-	-	-	-
cocoamidopropyl betaine hydrogenated	0.0135	0.00135	-	3000
sodium hydroxide	-	-	-	-

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m <sup>3</sup> )
disodium metasilicate	-	-	-	-
sodium alkylbenzenesulphonate	No data available	No data available	No data available	No data available
sodium cumenesulphonate	0.862	0.086	0.037	No data available
alkyl alcohol ethoxylate	-	-	-	-
cocoamidopropyl betaine hydrogenated	1	0.1	0.8	-
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:

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: ≥ 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 (%):** 10

**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:** No special requirements under normal use conditions.

## Suma Break up D3.5

**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

<p><b>Physical State:</b> Liquid  <b>Colour:</b> Clear, Yellow  <b>Odour:</b> Product specific  <b>Odour threshold:</b> Not applicable  <b>pH:</b> &gt; 12 (neat)  <b>Melting point/freezing point (°C):</b> Not determined  <b>Initial boiling point and boiling range (°C):</b> Not determined</p>	<p><b>Method / remark</b></p> <p>ISO 4316  Not relevant to classification of this product  See substance data</p>
--	---

Substance data, boiling point

Ingredient(s)	Value (°C)	Method	Atmospheric pressure (hPa)
disodium metasilicate	No data available		
sodium alkylbenzenesulphonate	No data available		
sodium cumenesulphonate	> 100	Method not given	
alkyl alcohol ethoxylate	> 232.2	Method not given	
cocoamidopropyl betaine hydrogenated	100	Method not given	
sodium hydroxide	> 990	Method not given	

**Method / remark**

**Flammability (liquid):** Not flammable.

**Flash point (°C):** not determined

**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

Not relevant to classification of this product

Substance data, flammability or explosive limits, if available:

**Method / remark**

**Vapour pressure:** Not determined

See substance data

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
sodium hydroxide	< 1330	Method not given	20

**Method / remark**

**Vapour density:** Not determined

**Relative density:** ≈ 1.10 (20 °C)

**Solubility in / Miscibility with Water:** Fully miscible

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

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	Soluble		
alkyl alcohol ethoxylate	100 Soluble	Method not given	
cocoamidopropyl betaine hydrogenated	> .? Soluble	Method not given	20
sodium hydroxide	1000	Method not given	20

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

## Suma Break up D3.5

## 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

Substance data, dissociation constant, if 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**

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): &gt;2000

**Skin irritation and corrosivity****Result:** Not corrosive to skin      **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 <sub>50</sub>	770 - 820	Mouse	Method not given	
sodium alkylbenzenesulphonate	LD <sub>50</sub>	> 1470	Rat	OECD 401 (EU B.1)	
sodium cumenesulphonate	LD <sub>50</sub>	> 7000	Rat	Method not given	
alkyl alcohol ethoxylate	LD <sub>50</sub>	1400	Rat	Method not given	
cocoamidopropyl betaine hydrogenated	LD <sub>50</sub>	2335	Rat	Method not given	
sodium hydroxide		No data available			

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 <sub>50</sub>	> 2000	Rabbit	Method not given	
alkyl alcohol ethoxylate	LD <sub>50</sub>	2000 - 5000	Rat	Method not given	
cocoamidopropyl betaine hydrogenated	LD <sub>50</sub>	> 5000	Rat	OECD 402 (EU B.3)	
sodium hydroxide	LD <sub>50</sub>	1350	Rabbit	Method not given	

Acute inhalative toxicity

## Suma Break up D3.5

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
disodium metasilicate		No data available			
sodium alkylbenzenesulphonate		No data available			
sodium cumenesulphonate	LC <sub>50</sub>	> 770	Rat	Method not given	4
alkyl alcohol ethoxylate		No data available			
cocoamidopropyl betaine hydrogenated	LC <sub>50</sub>	> 5 (mist)	Rat	Method not given	4
sodium hydroxide		No data available			

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

## 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)	
sodium hydroxide	Corrosive	Rabbit	Method not given	

## 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			
sodium hydroxide	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	
sodium hydroxide	Not sensitising		Human repeated patch test	

## 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			
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)
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)

## Suma Break up D3.5

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)
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
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
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
disodium metasilicate			No data available				
sodium alkylbenzenesulphonate			No data available				
sodium cumenesulphonate	NOAEL	Teratogenic effects	> 3000	Rat	Non guideline test		
alkyl alcohol ethoxylate	NOAEL		> 250	Rat	Not known		No effects on fertility No developmental toxicity
cocoamidopropyl betaine hydrogenated	NOEL	Developmental toxicity	300	Rat	OECD 414 (EU B.31), oral		
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
disodium metasilicate	NOAEL	> 227 - 237	Rat	Method not given		
sodium alkylbenzenesulphonate		No data available				
sodium cumenesulphonate	NOAEL	763 - 3534		OECD 408 (EU B.26)	90	
alkyl alcohol ethoxylate	NOAEL	80 - 400		Method not given		
cocoamidopropyl betaine hydrogenated	NOAEL	300	Rat	OECD 408 (EU B.26)	90	
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
disodium metasilicate		No data available				
sodium alkylbenzenesulphonate		No data available				
sodium cumenesulphonate	NOAEL	440	Mouse	Method not given	90	
alkyl alcohol ethoxylate	NOAEL	80		OECD 411 (EU B.28)	90	
cocoamidopropyl betaine hydrogenated		No data available				
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
disodium metasilicate		No data available				
sodium alkylbenzenesulphonate		No data available				
sodium cumenesulphonate		No data available				
alkyl alcohol ethoxylate		No data				



## Suma Break up D3.5

		available				
cocoamidopropyl betaine hydrogenated		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
disodium metasilicate			No data available					
sodium alkylbenzenesulphonate			No data available					
sodium cumenesulphonate	Dermal	NOAEL	727	Mouse	Method not given	24 month(s)		
alkyl alcohol ethoxylate			No data available					
cocoamidopropyl betaine hydrogenated			No data available					
sodium hydroxide			No data available					

## STOT-single exposure

Ingredient(s)	Affected organ(s)
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
sodium hydroxide	No data available

## STOT-repeated exposure

Ingredient(s)	Affected organ(s)
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
sodium hydroxide	No data available

## Aspiration hazard

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 <sub>50</sub>	210	<i>Brachydanio rerio</i>	Method not given	96
sodium alkylbenzenesulphonate		No data available			
sodium cumenesulphonate	LC <sub>50</sub>	> 1000	<i>Fish</i>	EPA-OPPTS 850.1075	96
alkyl alcohol ethoxylate	LC <sub>50</sub>	5 - 7	<i>Fish</i>	92/69/EEC, C1, semi-static	96
cocoamidopropyl betaine hydrogenated	LC <sub>50</sub>	1.11	<i>Fish</i>	OECD 203, semi-static	96
sodium hydroxide	LC <sub>50</sub>	35	<i>Various species</i>	Method not given	96

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
disodium metasilicate	EC <sub>50</sub>	1700	<i>Daphnia</i>	Method not given	48
sodium alkylbenzenesulphonate		No data			

## Suma Break up D3.5

		available			
sodium cumenesulphonate	EC <sub>50</sub>	> 1000	<i>Daphnia</i>	EPA-OPPTS 850.1010	48
alkyl alcohol ethoxylate	EC <sub>50</sub>	5.3	<i>Daphnia</i>	92/69/EEC	48
cocoamidopropyl betaine hydrogenated	EC <sub>50</sub>	1.9	<i>Daphnia</i>	OECD 202, static	48
sodium hydroxide	EC <sub>50</sub>	40.4	<i>Ceriodaphnia sp.</i>	Method not given	48

## Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
disodium metasilicate	EC <sub>50</sub>	207	<i>Chlorella pyrenoidosa</i>	Method not given	72
sodium alkylbenzenesulphonate		No data available			
sodium cumenesulphonate	E <sub>r</sub> C <sub>50</sub>	310	<i>Not specified</i>		72
alkyl alcohol ethoxylate	EC <sub>50</sub>	1.4 - 47	<i>Not specified</i>	92/69/EEC	72
cocoamidopropyl betaine hydrogenated	E <sub>r</sub> C <sub>50</sub>	2.4	<i>Not specified</i>	Method not given	72
sodium hydroxide	EC <sub>50</sub>	22	<i>Photobacterium phosphoreum</i>	Method not given	0.25

## 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 <sub>50</sub>	0.74	<i>Skeletonema costatum</i> <i>Phaeodactylum tricornutum</i>	ISO 10253	72
sodium hydroxide		No data available			-

## Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
disodium metasilicate	EC <sub>50</sub>	> 100	<i>Activated sludge</i>	Method not given	3 hour(s)
sodium alkylbenzenesulphonate		No data available			
sodium cumenesulphonate	E <sub>r</sub> C <sub>50</sub>	> 1000	<i>Bacteria</i>	OECD 209	3 hour(s)
alkyl alcohol ethoxylate	EC <sub>50</sub>	> 140	<i>Bacteria</i>	Method not given	3 hour(s)
cocoamidopropyl betaine hydrogenated	EC <sub>50</sub>	3000	<i>Bacteria</i>	ISO 13641 (2003), anaerobic	16 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
disodium metasilicate		No data available				
sodium alkylbenzenesulphonate		No data available				
sodium cumenesulphonate		No data available				
alkyl alcohol ethoxylate	EC <sub>10</sub>	8.983	<i>Not specified</i>	Method not given	21 day(s)	
cocoamidopropyl betaine hydrogenated	NOEC	0.135	<i>Oncorhynchus mykiss</i>	OECD 210	37 day(s)	
sodium hydroxide		No data available				

## 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 <sub>10</sub>	2.579	<i>Daphnia sp.</i>	Method not	21 day(s)	

## Suma Break up D3.5

				given		
cocoamidopropyl betaine hydrogenated	NOEC	0.3	<i>Daphnia magna</i>	OECD 211	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
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			-	
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
disodium metasilicate		No data available			-	
sodium cumenesulphonate		No data available			-	
alkyl alcohol ethoxylate		No data available			-	
cocoamidopropyl betaine hydrogenated	NOEC	≥ 846	<i>Eisenia fetida</i>		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
disodium metasilicate		No data available			-	
sodium cumenesulphonate		No data available			-	
alkyl alcohol ethoxylate		No data available			-	
cocoamidopropyl betaine hydrogenated	NOEC	84.6	<i>Brassica alba</i> <i>Lepidium sativum</i> <i>Triticum aestivum</i>	OECD 208	17	
sodium hydroxide		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			-	
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
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

sodium hydroxide		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			-	
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:

Abiotic degradation - other processes, if available:

**Biodegradation**

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT <sub>50</sub>	Method	Evaluation
disodium metasilicate					Not applicable (inorganic substance)
sodium alkylbenzenesulphonate				OECD 301B	Readily biodegradable
sodium cumenesulphonate	Activated sludge, aerobe	CO <sub>2</sub> production	100 % in 28 day(s)	OECD 301B	Readily biodegradable
alkyl alcohol ethoxylate			60 % in 28 day(s)	Read across	Readily biodegradable
cocoamidopropyl betaine hydrogenated	Activated sludge, aerobe	CO <sub>2</sub> production	91.6 % in 28 day(s)	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 <sub>50</sub>	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	Low potential for bioaccumulation	
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	
sodium hydroxide	No data available		Not relevant, does not bioaccumulate	

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	71		QSAR	Low potential for bioaccumulation	
sodium hydroxide	No data available				

**12.4 Mobility in soil**

Adsorption/Desorption to soil or sediment

Ingredient(s)	Adsorption	Desorption	Method	Soil/sediment	Evaluation
---------------	------------	------------	--------	---------------	------------

## Suma Break up D3.5

	coefficient Log Koc	coefficient Log Koc(des)		type	
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	2.0-5.1		QSAR		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 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****EU regulations:**

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

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

UFI: 00U1-U0VM-Y00H-W2DM

**Ingredients according to EC Detergents Regulation 648/2004**

phosphates

5 - 15 %

anionic surfactants, non-ionic surfactants, amphoteric 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:** MS1001957

**Version:** 01.2

**Revision:** 2019-05-19

**Reason for revision:**

This data sheet contains changes from the previous version in section(s): 3, 4, 6, 7, 8, 9, 11, 12, 16

**Suma Break up D3.5****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.
- H402 - Harmful to aquatic life.
- 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
- LD50 - Lethal Dose, 50% / Median Lethal dose
- LC50 - Lethal Concentration, 50% / Median Lethal Concentration
- EC50 - effective concentration, 50%
- NOEL - No observed effect level
- NOAEL - No observed adverse effect level
- OECD - Organization for Economic Cooperation and Development

**End of Safety Data Sheet**