



## Suma Shine K2

Revision: 2018-01-25

Version: 07.1

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

#### 1.1 Product identifier

Trade name: Suma Shine K2

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

##### Identified uses:

For professional use only.

AISE-P201 - Dishwash product. 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, 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

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 percarbonate (Sodium Carbonate Peroxide), disodium metasilicate (Sodium Metasilicate).

#### 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

Ingredient(s)	EC number	CAS number	REACH number	Classification	Notes	Weight percent
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sodium carbonate	207-838-8	497-19-8	01-2119485498-19	Eye Irrit. 2 (H319)		30-50
sodium percarbonate	239-707-6	15630-89-4	01-2119457268-30	Ox. Sol. 2 (H272) Acute Tox. 4 (H302) Eye Dam. 1 (H318)		20-30
disodium metasilicate	229-912-9	6834-92-0	01-21194449811-37	Skin Corr. 1B (H314) STOT SE 3 (H335) Met. Corr. 1 (H290)		3-10
disodium trisilicate	215-687-4	1344-09-8	01-2119448725-31	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319)		3-10
white mineral oil (petroleum)	232-455-8	8042-47-5	01-2119487078-27	Asp. Tox. 1 (H304)		1-3
sodium alkylbenzenesulphonate	290-656-6	90194-45-9	No data available	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318)		1-3

\* Polymer.

For the full text of the H and EUH phrases mentioned in this Section, see Section 16.

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.

## 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.

### 6.3 Methods and material for containment and cleaning up

Collect mechanically.

### 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:

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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
sodium carbonate	-	-	-	-
sodium percarbonate	-	-	-	-
disodium metasilicate	-	-	-	0.74
disodium trisilicate	-	-	-	0.8
white mineral oil (petroleum)	No data available	No data available	No data available	No data available
sodium alkylbenzenesulphonate	No data available	No data available	No data available	No data available

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)
sodium carbonate	No data available	-	No data available	-
sodium percarbonate	12.8 mg/cm <sup>2</sup> skin	-	12.8 mg/cm <sup>2</sup> skin	-
disodium metasilicate	No data available	-	No data available	1.49
disodium trisilicate	No data available	-	No data available	1.59
white mineral oil (petroleum)	No data available	No data available	No data available	No data available
sodium alkylbenzenesulphonate	No data available	No data available	No data available	No data available

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)
sodium carbonate	No data available	-	No data available	-
sodium percarbonate	6.4 mg/cm <sup>2</sup> skin	-	6.4 mg/cm <sup>2</sup> skin	-
disodium metasilicate	No data available	-	No data available	0.74
disodium trisilicate	No data available	-	No data available	0.8
white mineral oil (petroleum)	No data available	No data available	No data available	No data available
sodium alkylbenzenesulphonate	No data available	No data available	No data available	No data available

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
sodium carbonate	-	-	10	-
sodium percarbonate	-	-	5	-
disodium metasilicate	-	-	-	6.22
disodium trisilicate	-	-	-	5.61
white mineral oil (petroleum)	No data available	No data available	No data available	No data available
sodium alkylbenzenesulphonate	No data available	No data available	No data available	No data available

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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
sodium carbonate	10	-	-	-
sodium percarbonate	-	-	-	-
disodium metasilicate	-	-	-	1.55
disodium trisilicate	-	-	-	1.38
white mineral oil (petroleum)	No data available	No data available	No data available	No data available
sodium alkylbenzenesulphonate	No data available	No data available	No data available	No data available

## Environmental exposure

Environmental exposure - PNEC

Ingredient(s)	Surface water, fresh (mg/l)	Surface water, marine (mg/l)	Intermittent (mg/l)	Sewage treatment plant (mg/l)
sodium carbonate	-	-	-	-
sodium percarbonate	0.035	0.035	0.035	16.24
disodium metasilicate	7.5	1	7.5	1000
disodium trisilicate	7.5	1	7.5	348
white mineral oil (petroleum)	No data available	No data available	No data available	No data available
sodium alkylbenzenesulphonate	No data available	No data available	No data available	No data available

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m <sup>3</sup> )
sodium carbonate	-	-	-	-
sodium percarbonate	-	-	-	-
disodium metasilicate	-	-	-	-
disodium trisilicate	-	-	-	-
white mineral oil (petroleum)	No data available	No data available	No data available	No data available
sodium alkylbenzenesulphonate	No data available	No data available	No data available	No data available

## 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 (%): 2

**Appropriate engineering controls:** No special requirements under normal use conditions.

**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.

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**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
<b>Physical State:</b> Solid	
<b>Colour:</b> White	
<b>Odour:</b> Product specific	
<b>Odour threshold:</b> Not applicable	
<b>pH:</b>	
<b>Dilution pH:</b> ≈ 12 (1%)	
<b>Melting point/freezing point (°C):</b> Not determined	Not relevant to classification of this product
<b>Initial boiling point and boiling range (°C):</b> Not determined	

Substance data, boiling point

Ingredient(s)	Value (°C)	Method	Atmospheric pressure (hPa)
sodium carbonate	1600	Method not given	1013
sodium percarbonate	Product decomposes before boiling		
disodium metasilicate	No data available		
disodium trisilicate	> 100	Method not given	
white mineral oil (petroleum)	> 315	Method not given	
sodium alkylbenzenesulphonate	No data available		

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 determined  
**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)
sodium carbonate	Negligible		
sodium percarbonate	Negligible		
disodium metasilicate	No data available		
disodium trisilicate	No data available		
white mineral oil (petroleum)	< 1.3	Method not given	37.8
sodium alkylbenzenesulphonate	No data available		

Method / remark

**Vapour density:** Not determined  
**Relative density:** ≈ 1.05 (20 °C)  
**Solubility in / Miscibility with Water:** Soluble

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
sodium carbonate	210-215	Method not given	20
sodium percarbonate	140	Method not given	20
disodium metasilicate	350	Method not given	20
disodium trisilicate	Soluble	Method not given	20
white mineral oil (petroleum)	Insoluble	Method not given	
sodium alkylbenzenesulphonate	No data available		

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.

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**Oxidising properties:** Not oxidising.

### 9.2 Other information

**Surface tension (N/m):** Not determined

Not relevant to classification of this product

**Corrosion to metals:** Not determined

Not applicable to solids or gases

Substance data, dissociation constant, if available:

Ingredient(s)	Value	Method	Temperature (°C)
disodium trisilicate	9.9 - 12 (pKa)	Method not given	

## 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): >2000

#### Skin irritation and corrosivity

**Result:** Not corrosive

**Method:** OECD 431 (EU B.40 bis), Episkin

#### Eye irritation and corrosivity

**Result:** No data available

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)
sodium carbonate	LD <sub>50</sub>	2800	Rat	Method not given	
sodium percarbonate	LD <sub>50</sub>	1034	Rat	Method not given	
disodium metasilicate	LD <sub>50</sub>	770 - 820	Mouse	Method not given	
disodium trisilicate	LD <sub>50</sub>	3400	Rat	Method not given	
white mineral oil (petroleum)		No data available			
sodium alkylbenzenesulphonate		No data available			

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
sodium carbonate	LD <sub>50</sub>	> 2000	Rabbit	Method not given	
sodium percarbonate	LD <sub>50</sub>	> 2000	Rabbit	OECD 402 (EU B.3)	
disodium metasilicate		No data available			
disodium trisilicate	LD <sub>50</sub>	> 5000	Rat	Method not given	
white mineral oil (petroleum)		No data available			
sodium alkylbenzenesulphonate		No data available			

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## Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium carbonate	LC <sub>50</sub>	2.3 (dust)	Rat	OECD 403 (EU B.2)	2
sodium percarbonate		No data available			
disodium metasilicate		No data available			
disodium trisilicate		No mortality observed	Rat	Non guideline test	4
white mineral oil (petroleum)		No data available			
sodium alkylbenzenesulphonate		No data available			

## Irritation and corrosivity

## Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium carbonate	Not irritant	Rabbit	Method not given	
sodium percarbonate	Not irritant	Rabbit	Method not given	
disodium metasilicate	Corrosive		Method not given	
disodium trisilicate	Irritant		Method not given	
white mineral oil (petroleum)	No data available			
sodium alkylbenzenesulphonate	No data available			

## Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium carbonate	Irritant	Rabbit	Method not given	
sodium percarbonate	Severe damage	Rabbit	EPA OPP 81-4	
disodium metasilicate	Corrosive		Method not given	
disodium trisilicate	Severe damage		Method not given	
white mineral oil (petroleum)	No data available			
sodium alkylbenzenesulphonate	No data available			

## Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium carbonate	No data available			
sodium percarbonate	Irritating to respiratory tract	Mouse	Method not given	
disodium metasilicate	No data available			
disodium trisilicate	Irritating to respiratory tract		Method not given	
white mineral oil (petroleum)	No data available			
sodium alkylbenzenesulphonate	No data available			

## Sensitisation

## Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
sodium carbonate	Not sensitising		Method not given	
sodium percarbonate	Not sensitising	Guinea pig	OECD 406 (EU B.6) / Buehler test	
disodium metasilicate	No data available			
disodium trisilicate	Not sensitising		Method not given	
white mineral oil (petroleum)	No data available			
sodium alkylbenzenesulphonate	No data available			

## Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
sodium carbonate	No data available			
sodium percarbonate	No data available			
disodium metasilicate	No data available			
disodium trisilicate	No data available			
white mineral oil (petroleum)	No data available			
sodium alkylbenzenesulphonate	No data available			

## CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

## Mutagenicity

Ingredient(s)	Result (in-vitro)	Method (in-vitro)	Result (in-vivo)	Method (in-vivo)
sodium carbonate	No data available		No data available	
sodium percarbonate	No data available		No data available	

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disodium metasilicate	No data available		No data available	
disodium trisilicate	No evidence for mutagenicity, negative test results		No data available	
white mineral oil (petroleum)	No data available		No data available	
sodium alkylbenzenesulphonate	No data available		No data available	

## Carcinogenicity

Ingredient(s)	Effect
sodium carbonate	No evidence for carcinogenicity, weight-of-evidence
sodium percarbonate	No data available
disodium metasilicate	No data available
disodium trisilicate	No evidence for carcinogenicity, negative test results
white mineral oil (petroleum)	No data available
sodium alkylbenzenesulphonate	No data available

## Toxicity for reproduction

Ingredient(s)	Endpoint	Specific effect	Value (mg/kg bw/d)	Species	Method	Exposure time	Remarks and other effects reported
sodium carbonate			No data available				
sodium percarbonate			No data available				
disodium metasilicate			No data available				
disodium trisilicate			No data available				No evidence for reproductive toxicity
white mineral oil (petroleum)			No data available				
sodium alkylbenzenesulphonate			No data available				

## Repeated dose toxicity

## Sub-acute or sub-chronic oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
sodium carbonate		No data available				
sodium percarbonate		No data available				
disodium metasilicate	NOAEL	> 227 - 237	Rat	Method not given		
disodium trisilicate	NOAEL	> 159	Rat	Method not given	180	No effects observed
white mineral oil (petroleum)		No data available				
sodium alkylbenzenesulphonate		No data available				

## Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
sodium carbonate		No data available				
sodium percarbonate		No data available				
disodium metasilicate		No data available				
disodium trisilicate		No data available				
white mineral oil (petroleum)		No data available				
sodium alkylbenzenesulphonate		No data available				

## Sub-chronic inhalation toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
sodium carbonate		No data available				
sodium percarbonate		No data available				
disodium metasilicate		No data available				
disodium trisilicate		No data available				
white mineral oil (petroleum)		No data available				
sodium alkylbenzenesulphonate		No data available				



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## Chronic toxicity

Ingredient(s)	Exposure route	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time	Specific effects and organs affected	Remark
sodium carbonate			No data available					
sodium percarbonate			No data available					
disodium metasilicate			No data available					
disodium trisilicate			No data available					
white mineral oil (petroleum)			No data available					
sodium alkylbenzenesulphonate			No data available					

## STOT-single exposure

Ingredient(s)	Affected organ(s)
sodium carbonate	No data available
sodium percarbonate	No data available
disodium metasilicate	No data available
disodium trisilicate	No data available
white mineral oil (petroleum)	No data available
sodium alkylbenzenesulphonate	No data available

## STOT-repeated exposure

Ingredient(s)	Affected organ(s)
sodium carbonate	No data available
sodium percarbonate	No data available
disodium metasilicate	No data available
disodium trisilicate	Not applicable
white mineral oil (petroleum)	No data available
sodium alkylbenzenesulphonate	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)
sodium carbonate	LC <sub>50</sub>	300	<i>Lepomis macrochirus</i>	Method not given	96
sodium percarbonate	LC <sub>50</sub>	70.7	<i>Pimephales promelas</i>	Method not given	96
disodium metasilicate	LC <sub>50</sub>	210	<i>Brachydanio rerio</i>	Method not given	96
disodium trisilicate	LC <sub>50</sub>	260 - 310	<i>Oncorhynchus mykiss</i>	Method not given	96
white mineral oil (petroleum)		No data available			
sodium alkylbenzenesulphonate		No data available			

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium carbonate	EC <sub>50</sub>	265	<i>Daphnia magna</i> Straus	Method not given	96
sodium percarbonate	EC <sub>50</sub>	4.9	<i>Daphnia pulex</i>	Method not given	48
disodium metasilicate	EC <sub>50</sub>	1700	<i>Daphnia</i>	Method not given	48

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disodium trisilicate	EC <sub>50</sub>	1700	<i>Daphnia magna Straus</i>	OECD 202, static	48
white mineral oil (petroleum)		No data available			
sodium alkylbenzenesulphonate		No data available			

## Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium carbonate		No data available			-
sodium percarbonate		No data available			-
disodium metasilicate	EC <sub>50</sub>	207	<i>Chlorella pyrenoidosa</i>	Method not given	72
disodium trisilicate	EC <sub>50</sub>	207	<i>Desmodesmus subspicatus</i>	DIN 38412, Part 9	72
white mineral oil (petroleum)		No data available			
sodium alkylbenzenesulphonate		No data available			

## Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
sodium carbonate		No data available			-
sodium percarbonate		No data available			-
disodium metasilicate		No data available			-
disodium trisilicate		No data available			-
white mineral oil (petroleum)		No data available			
sodium alkylbenzenesulphonate		No data available			

## Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
sodium carbonate		No data available			
sodium percarbonate	EC <sub>50</sub>	466	<i>Activated sludge</i>	OECD 209	0.5 hour(s)
disodium metasilicate	EC <sub>50</sub>	> 100	<i>Activated sludge</i>	Method not given	3 hour(s)
disodium trisilicate		No data available			
white mineral oil (petroleum)		No data available			
sodium alkylbenzenesulphonate		No data available			

## Aquatic long-term toxicity

## Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
sodium carbonate		No data available				
sodium percarbonate	NOEC	7.4	<i>Pimephales promelas</i>	Method not given	96 hour(s)	
disodium metasilicate		No data available				
disodium trisilicate	NOEC	348	<i>Brachydanio rerio</i>	Method not given	96 hour(s)	
white mineral oil (petroleum)		No data available				
sodium alkylbenzenesulphonate		No data available				

## Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
sodium carbonate		No data available				
sodium percarbonate	NOEC	2	<i>Daphnia pulex</i>	Method not given	48 hour(s)	
disodium metasilicate		No data available				
disodium trisilicate		No data available				

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		available				
white mineral oil (petroleum)		No data available				
sodium alkylbenzenesulphonate		No data available				

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

Ingredient(s)	Endpoint	Value (mg/kg dw sediment)	Species	Method	Exposure time (days)	Effects observed
sodium carbonate		No data available			-	
sodium percarbonate		No data available			-	
disodium metasilicate		No data available			-	
disodium trisilicate		No data available			-	
white mineral oil (petroleum)		No data available				
sodium alkylbenzenesulphonate		No data available				

**Terrestrial toxicity**

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

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
sodium carbonate		No data available			-	
sodium percarbonate		No data available			-	
disodium metasilicate		No data available			-	
disodium trisilicate		No data available			-	

Terrestrial toxicity - plants, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
sodium carbonate		No data available			-	
sodium percarbonate		No data available			-	
disodium metasilicate		No data available			-	
disodium trisilicate		No data available			-	

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
sodium carbonate		No data available			-	
sodium percarbonate		No data available			-	
disodium metasilicate		No data available			-	
disodium trisilicate		No data available			-	

Terrestrial toxicity - beneficial insects, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
sodium carbonate		No data available			-	
sodium percarbonate		No data available			-	
disodium metasilicate		No data available			-	
disodium trisilicate		No data available			-	

Terrestrial toxicity - soil bacteria, if available:

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

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sodium percarbonate		No data available			-	
disodium metasilicate		No data available			-	
disodium trisilicate		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 percarbonate	NA	Method not given		

Abiotic degradation - hydrolysis, if available:

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

Abiotic degradation - other processes, if available:

**Biodegradation**

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT <sub>50</sub>	Method	Evaluation
sodium carbonate					Not applicable (inorganic substance)
sodium percarbonate					Not applicable (inorganic substance)
disodium metasilicate					Not applicable (inorganic substance)
disodium trisilicate					Not applicable (inorganic substance)
white mineral oil (petroleum)				OECD 301F	Not readily biodegradable.
sodium alkylbenzenesulphonate					Readily biodegradable

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

**12.3 Bioaccumulative potential**Partition coefficient n-octanol/water (log K<sub>ow</sub>)

Ingredient(s)	Value	Method	Evaluation	Remark
sodium carbonate	No data available		No bioaccumulation expected	
sodium percarbonate	No data available			
disodium metasilicate	No data available			
disodium trisilicate	No data available		Low potential for bioaccumulation	
white mineral oil (petroleum)	No data available			
sodium alkylbenzenesulphonate	No data available			

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
sodium carbonate	No data available			No bioaccumulation expected	
sodium percarbonate	No data available				
disodium metasilicate	No data available				
disodium trisilicate	No data available				
white mineral oil (petroleum)	No data available				
sodium alkylbenzenesulphonate	No data available				

**12.4 Mobility in soil**

Adsorption/Desorption to soil or sediment

Ingredient(s)	Adsorption coefficient Log K <sub>oc</sub>	Desorption coefficient Log K <sub>oc</sub> (des)	Method	Soil/sediment type	Evaluation
sodium carbonate	No data available				Potential for mobility in soil, soluble in water
sodium percarbonate	No data available				High potential for mobility in soil
disodium metasilicate	No data available				
disodium trisilicate	No data available				
white mineral oil (petroleum)	No data available				
sodium alkylbenzenesulphonate	No data available				

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**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.

**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**

oxygen-based bleaching agents, phosphates

15 - 30%

aliphatic hydrocarbons, anionic 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:** MSDS3417

**Version:** 07.1

**Revision:** 2018-01-25

**Reason for revision:**

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

**Classification procedure**

The classification of the mixture is in general based on calculation methods using substance data, as required by Regulation (EC) No 1272/2008. If for certain classifications data on the mixture is available or for example bridging principles or weight of evidence can be used for classification, this will be indicated in the relevant sections of the Safety Data Sheet. See section 9 for physical chemical properties, section 11 for toxicological information and section 12 for ecological information.

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

- H272 - May intensify fire; oxidiser.
- H290 - May be corrosive to metals.
- H302 - Harmful if swallowed.
- H304 - May be fatal if swallowed and enters airways.
- H314 - Causes severe skin burns and eye damage.

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- H315 - Causes skin irritation.
- H318 - Causes serious eye damage.
- H319 - Causes serious eye irritation.
- H335 - May cause respiratory irritation.

**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**