

**Suma Star D1**

Revision: 2014-12-12

Version: 05.0

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

**1.1 Product identifier**

Trade name: Suma Star D1

**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

AISE-P301 - General purpose cleaner. 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: MSDSinfoUK@sealedair.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**

The product has been classified and labelled in accordance with Regulation (EC) No 1272/2008.

Eye Irrit. 2 (H319)

**The product does not meet the criteria for classification in accordance with Directive 1999/45/EC and corresponding national legislation**

**2.2 Label elements**



Signal word: Warning

**Hazard statements:**

H319 - Causes serious eye irritation.

**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	Classification	Notes	Weight
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					(1999/45/EC)		percent
sodium alkylbenzenesulphonate	290-656-6	90194-45-9	[1]	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318)	Xn;R22 Xi;R38-41		10-20
sodium alkylethersulphate	Polymer*	68585-34-2	01-2119488639-16	Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Aquatic Chronic 3 (H412)	Xi;R38-41		3-10
bronopol (INN)	200-143-0	52-51-7	No data available	Acute Tox. 4 (H302) Acute Tox. 4 (H312) STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Aquatic Acute 1 (H400)	Xn;R21/22 Xi;R37/38-41 N;R50		0.01-0.1

\* Polymer.

For the full text of the R, 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. 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. If irritation occurs and persists, get medical attention.

#### Ingestion:

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:

No known effects or symptoms in normal use.

#### Eye contact:

Causes severe irritation.

#### 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

No special measures required.

### 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

### 7.1 Precautions for safe handling

#### Measures to prevent fire and explosions:

No special precautions required.

#### Measures required to protect the environment:

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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 Sealed Air. 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. Use personal protective equipment as required. 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 alkylbenzenesulphonate	No data available	No data available	No data available	No data available
sodium alkylethersulphate	No data available	No data available	No data available	No data available
bronopol (INN)	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 alkylbenzenesulphonate	No data available	No data available	No data available	No data available
sodium alkylethersulphate	No data available	No data available	No data available	No data available
bronopol (INN)	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 alkylbenzenesulphonate	No data available	No data available	No data available	No data available
sodium alkylethersulphate	No data available	No data available	No data available	No data available
bronopol (INN)	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 alkylbenzenesulphonate	No data available	No data available	No data available	No data available
sodium alkylethersulphate	No data available	No data available	No data available	No data available
bronopol (INN)	No data available	No data available	No data available	No data available

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 alkylbenzenesulphonate	No data available	No data available	No data available	No data available
sodium alkylethersulphate	No data available	No data available	No data available	No data available
bronopol (INN)	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 alkylbenzenesulphonate	No data available	No data available	No data available	No data available
sodium alkylethersulphate	No data available	No data available	No data available	No data available
bronopol (INN)	0.01	0.0008	0.0025	0.43

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m <sup>3</sup> )
sodium alkylbenzenesulphonate	No data available	No data available	No data available	No data available

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sodium alkylethersulphate	No data available	No data available	No data available	No data available
bronopol (INN)	0.041	0.00328	0.5	No data available

**8.2 Exposure controls**

The following information applies for the uses indicated in subsection 1.2.  
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:** No special requirements under normal use conditions.  
**Appropriate organisational controls:** Avoid direct contact and/or splashes where possible. Train personnel.

**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.

Recommended safety measures for handling the diluted product:

**Recommended maximum concentration (%):** 0.4

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

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, Green  
**Odour:** Slightly perfumed  
**Odour threshold:** Not applicable  
**pH:** ≈ 6 (neat)  
**Melting point/freezing point (°C):** Not determined  
**Initial boiling point and boiling range (°C):** Not determined

Substance data, boiling point

Ingredient(s)	Value (°C)	Method	Atmospheric pressure (hPa)
sodium alkylbenzenesulphonate	No data available		
sodium alkylethersulphate	> 100	Method not given	
bronopol (INN)	No data available		

**Method / remark**

**Flash point (°C):** > 100  
**Sustained combustion:** Not determined  
**Evaporation rate:** Not determined  
**Flammability (solid, gas):** Not applicable to liquids  
**Upper/lower flammability limit (%):** Not determined

closed cup

Substance data, flammability or explosive limits, if available:

**Method / remark**

**Vapour pressure:** Not determined

Substance data, vapour pressure

Ingredient(s)	Value	Method	Temperature
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	(Pa)		(°C)
sodium alkylbenzenesulphonate	No data available		
sodium alkylethersulphate	No data available		
bronopol (INN)	0.0051	OECD 104 (EU A.4)	20

## Method / remark

**Vapour density:** Not determined  
**Relative density:** 1.03 g/cm<sup>3</sup> (20 °C)  
**Solubility in / Miscibility with Water:** Fully miscible

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
sodium alkylbenzenesulphonate	No data available		
sodium alkylethersulphate	Soluble		20
bronopol (INN)	280	Method not given	23

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

## Method / remark

**Autoignition temperature:** Not determined  
**Decomposition temperature:** Not determined  
**Viscosity:** ≈ 300 mPa.s (20 °C)  
**Explosive properties:** Not explosive.  
**Oxidising properties:** Not oxidising

## 9.2 Other information

**Surface tension (N/m):** Not determined  
**Corrosion to metals:** Not corrosive

Substance data, dissociation constant, if available:

Ingredient(s)	Value	Method	Temperature (°C)
bronopol (INN)	9.56 (pKa)	Method not given	21

## SECTION 10: Stability and reactivity

## 10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

## 10.2 Chemical stability

Stable under normal storage and use conditions.

## 10.3 Possibility of hazardous reactions

No hazardous reactions known under normal storage and use conditions.

## 10.4 Conditions to avoid

None known under normal storage and use conditions.

## 10.5 Incompatible materials

None known under normal use conditions.

## 10.6 Hazardous decomposition products

None known under normal storage and use conditions.

## SECTION 11: Toxicological information

## 11.1 Information on toxicological effects

Mixture data:

## Relevant calculated ATE(s):

ATE - Oral (mg/kg): &gt;2000

## Skin irritation and corrosivity

**Result:** Not corrosive or irritant **Method:** Weight of evidence

## Eye irritation and corrosivity

**Result:** Eye irritant 2 **Method:** Weight of evidence

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)
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sodium alkylbenzenesulphonate		No data available			
sodium alkylethersulphate	LD <sub>50</sub>	> 2000	Rat	OECD 401 (EU B.1)	
bronopol (INN)	LD <sub>50</sub>	305	Rat	OECD 401 (EU B.1)	

## Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
sodium alkylbenzenesulphonate		No data available			
sodium alkylethersulphate	LD <sub>50</sub>	> 2000	Rat	OECD 402 (EU B.3)	
bronopol (INN)	LD <sub>50</sub>	> 2000	Rat	OECD 402 (EU B.3)	

## Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium alkylbenzenesulphonate		No data available			
sodium alkylethersulphate		No data available			
bronopol (INN)		No data available			

## Irritation and corrosivity

## Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium alkylbenzenesulphonate	No data available			
sodium alkylethersulphate	Irritant	Rabbit	OECD 404 (EU B.4)	
bronopol (INN)	Irritant	Rabbit	OECD 404 (EU B.4)	

## Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium alkylbenzenesulphonate	No data available			
sodium alkylethersulphate	Severe damage	Rabbit	OECD 405 (EU B.5)	
bronopol (INN)	Severe damage	Rabbit	Method not given	

## Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium alkylbenzenesulphonate	No data available			
sodium alkylethersulphate	No data available			
bronopol (INN)	No data available			

## Sensitisation

## Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
sodium alkylbenzenesulphonate	No data available			
sodium alkylethersulphate	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT Read across	
bronopol (INN)	No data available			

## Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
sodium alkylbenzenesulphonate	No data available			
sodium alkylethersulphate	No data available			
bronopol (INN)	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 alkylbenzenesulphonate	No data available		No data available	
sodium alkylethersulphate	No evidence for mutagenicity, negative test results	OECD 476 (Chinese Hamster Ovary)	No evidence for mutagenicity, negative test results	
bronopol (INN)	No evidence for mutagenicity, negative test results	Method not given	No data available	

## Carcinogenicity

Ingredient(s)	Effect
sodium alkylbenzenesulphonate	No data available
sodium alkylethersulphate	No evidence for carcinogenicity, negative test results
bronopol (INN)	No data available

## Toxicity for reproduction

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Ingredient(s)	Endpoint	Specific effect	Value (mg/kg bw/d)	Species	Method	Exposure time	Remarks and other effects reported
sodium alkylbenzenesulphonate			No data available				
sodium alkylethersulphate	NOAEL	Developmental toxicity	86.6	Rat	OECD 416, (EU B.35), oral		No known significant effects or critical hazards
bronopol (INN)			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 alkylbenzenesulphonate		No data available				
sodium alkylethersulphate	NOAEL	50		Method not given		
bronopol (INN)		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 alkylbenzenesulphonate		No data available				
sodium alkylethersulphate	NOEL	> 12.5		Method not given		
bronopol (INN)		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 alkylbenzenesulphonate		No data available				
sodium alkylethersulphate		No data available				
bronopol (INN)		No data available				

Chronic toxicity

Ingredient(s)	Exposure route	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time	Specific effects and organs affected	Remark
sodium alkylbenzenesulphonate			No data available					
sodium alkylethersulphate			No data available					
bronopol (INN)			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
sodium alkylbenzenesulphonate	No data available
sodium alkylethersulphate	No data available
bronopol (INN)	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
sodium alkylbenzenesulphonate	No data available
sodium alkylethersulphate	No data available
bronopol (INN)	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

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**Aquatic short-term toxicity**

Aquatic short-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium alkylbenzenesulphonate		No data available			
sodium alkylethersulphate	LC <sub>50</sub>	1 - 10	<i>Brachydanio rerio</i>	OECD 203, semi-static	96
bronopol (INN)	LC <sub>50</sub>	41.2	<i>Oncorhynchus mykiss</i>	Method not given	96

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium alkylbenzenesulphonate		No data available			
sodium alkylethersulphate	EC <sub>50</sub>	1 - 10	<i>Daphnia</i>	OECD 202, static	48
bronopol (INN)	EC <sub>50</sub>	1.4	<i>Not specified</i>	Method not given	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium alkylbenzenesulphonate		No data available			
sodium alkylethersulphate	EC <sub>50</sub>	7.5	<i>Not specified</i>	DIN 38412, Part 9	72
bronopol (INN)	EC <sub>50</sub>	0.4 - 2.8	<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)
sodium alkylbenzenesulphonate		No data available			
sodium alkylethersulphate		No data available			
bronopol (INN)		No data available			

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
sodium alkylbenzenesulphonate		No data available			
sodium alkylethersulphate	EC <sub>10</sub>	300 - 500		Method not given	0.5 hour(s)
bronopol (INN)	EC <sub>20</sub>	2	<i>Activated sludge</i>	OECD 209	150 minute(s)

**Aquatic long-term toxicity**

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
sodium alkylbenzenesulphonate		No data available				
sodium alkylethersulphate	NOEC	0.1 - 0.13	<i>Not specified</i>	Method not given	365 day(s)	
bronopol (INN)	EC <sub>50</sub>	39.1	<i>Oncorhynchus mykiss</i>	OECD 210	49 hour(s)	

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
sodium alkylbenzenesulphonate		No data available				
sodium alkylethersulphate	NOEC	0.18 - 0.72	<i>Daphnia sp.</i>	Method not given	21 day(s)	
bronopol (INN)	NOEC	0.27	<i>Daphnia magna</i>	OECD 211, flow-through	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
sodium alkylbenzenesulphonate		No data available				
sodium alkylethersulphate	NOEC	0.72 - 0.9		Method not given	3	
bronopol (INN)		No data available				

**Terrestrial toxicity**

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

Ingredient(s)	Endpoint	Value (mg/kg dw)	Species	Method	Exposure time (days)	Effects observed
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		soil)				
bronopol (INN)	LD <sub>50</sub>	> 500	<i>Eisenia fetida</i>	OECD 207	14	

Terrestrial toxicity - plants, if available:

Terrestrial toxicity - birds, if available:

Terrestrial toxicity - beneficial insects, if available:

Terrestrial toxicity - soil bacteria, if available:

## 12.2 Persistence and degradability

### Abiotic degradation

Abiotic degradation - photodegradation in air, if available:

Abiotic degradation - hydrolysis, if available:

Ingredient(s)	Half-life time in fresh water	Method	Evaluation	Remark
bronopol (INN)	No data available	OECD 111	Rapidly hydrolysible	

Abiotic degradation - other processes, if available:

### Biodegradation

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT <sub>50</sub>	Method	Evaluation
sodium alkylbenzenesulphonate					No data available
sodium alkylethersulphate			> 60 % in 28 day(s)	OECD 301B	Readily biodegradable
bronopol (INN)					No data available

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

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.

## 12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
sodium alkylbenzenesulphonate	No data available			
sodium alkylethersulphate	0.95 - 3.9	Method not given	Low potential for bioaccumulation	
bronopol (INN)	0.18	Method not given	No bioaccumulation expected	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
sodium alkylbenzenesulphonate	No data available				
sodium alkylethersulphate	No data available				
bronopol (INN)	No data available				

## 12.4 Mobility in soil

Adsorption/Desorption to soil or sediment

Ingredient(s)	Adsorption coefficient Log Koc	Desorption coefficient Log Koc(des)	Method	Soil/sediment type	Evaluation
sodium alkylbenzenesulphonate	No data available				
sodium alkylethersulphate	No data available				
bronopol (INN)	No data available				

## 12.5 Results of PBT and vPvB assessment

Substances that fulfill the criteria for PBT/vPvB, if any, are listed in section 3.

## 12.6 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.

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**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

**ADR, RID, ADN, IMO/IMDG, ICAO/IATA**

**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 73/78 and the IBC Code:** The product is not transported in bulk tankers.

## SECTION 15: Regulatory information

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

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

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

anionic surfactants

15 - 30%

perfumes, Citral, Limonene, 2-Bromo-2-Nitropropane-1,3-Diol

**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*

**MSDS code:** MSDS3344

**Version:** 05.0

**Revision:** 2014-12-12

**Reason for revision:**

Overall design adjusted in accordance with Amendment 453/2010, Annex II of Regulation (EC) No 1907/2006, This data sheet contains changes from the previous version in section(s):, 3, 13

**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 R, H and EUH phrases mentioned in section 3:**

- H315 - Causes skin irritation.
- H319 - Causes serious eye irritation.
- H332 - Harmful if inhaled.
- H411 - Toxic to aquatic life with long lasting effects.
- H228 - Flammable solid.
- H302 - Harmful if swallowed.
- H318 - Causes serious eye damage.
- H371 - May cause damage to organs.
- H410 - Very toxic to aquatic life with long lasting effects.
- H412 - Harmful to aquatic life with long lasting effects.
- H226 - Flammable liquid and vapour.
- H312 - Harmful in contact with skin.
- H317 - May cause an allergic skin reaction.
- H335 - May cause respiratory irritation.
- H400 - Very toxic to aquatic life.
- H304 - May be fatal if swallowed and enters airways.
- R11 - Highly flammable.
- R20 - Harmful by inhalation.
- R21 - Harmful in contact with skin.
- R41 - Risk of serious damage to eyes.
- R43 - May cause sensitisation by skin contact.
- R65 - Harmful: may cause lung damage if swallowed.
- R36 - Irritating to eyes.
- R37 - Irritating to respiratory system.
- R10 - Flammable.
- R22 - Harmful if swallowed.
- R38 - Irritating to skin.
- R50 - Very toxic to aquatic organisms.

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- R68/22 - Harmful: possible risk of irreversible effects if swallowed.
- R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**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**