

**Suma Star Plus D1-PLUS**

Revision: 2014-09-04

Version: 10.0

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

**1.1 Product identifier**

**Trade name:** Suma Star Plus D1-PLUS

**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: 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.

Acute Tox. 4 (H302)

Skin Irrit. 2 (H315)

Eye Dam. 1 (H318)

Aquatic Chronic 3 (H412)

**Classification in accordance with Directive 1999/45/EC and corresponding national legislation**

**Indication of danger**

Xn - Harmful

**Risk phrases:**

R22 - Harmful if swallowed.

R38 - Irritating to skin.

R41 - Risk of serious damage to eyes.

**2.2 Label elements**



**Signal word:** Danger

Contains benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine (MIPA-Dodecylbenzenesulfonate), alkyl alcohol ethoxylated, sulfated, monoisopropanolamine salt (MIPA Laureth Sulfate), alkyl polyglucoside (Lauryl Glucoside).

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**Hazard statements:**

H302 - Harmful if swallowed  
 H315 - Causes skin irritation  
 H318 - Causes serious eye damage  
 H412 - Harmful to aquatic life with long lasting effects

**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 (EC) 1272/2008	Classification	Notes	Weight percent
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine	289-091-8	85995-83-1	No data available	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Aquatic Chronic 3 (H412)	Xn;R22 Xi;R38-41		30-50
propane-1,2-diol	200-338-0	57-55-6	01-2119456809-23		-		10-20
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	932-185-7	1187742-72-8	01-2119976350-37	Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Aquatic Chronic 3 (H412)	Xi;R38-41		10-20
alkyl polyglucoside	500-522-3	110615-47-9	01-2119489418-23	Skin Irrit. 2 (H315) Eye Dam. 1 (H318)	Xi;R38-41		3-10

\* 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****General Information:**

Symptoms of intoxication may even occur after several hours. It is recommended to continue medical observation for at least 48 hours after the incident.

**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 or rash 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. Call a POISON CENTRE, doctor or physician.

**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.

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**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. Do not allow to enter the ground/soil. Dilute with plenty of water. Inform responsible authorities in case undiluted product reaches drainage system, surface or ground water or the ground/soil.

**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:**

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. 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:

Ingredient(s)	UK - Long term value(s)	UK - Short term value(s)
propane-1,2-diol	150 ppm total particulate and vapour 474 mg/m <sup>3</sup> total particulate and vapour 10 mg/m <sup>3</sup> particulate	450 ppm total particulate and vapour 1422 mg/m <sup>3</sup> total particulate and vapour 30 mg/m <sup>3</sup> particulate

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
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine	No data available	No data available	No data available	No data available
propane-1,2-diol	No data available	No data available	No data available	No data available
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	No data available	No data available	No data available	No data available
alkyl polyglucoside	No data available	No data available	No data available	35.7

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)

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benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine	No data available	No data available	No data available	No data available
propane-1,2-diol	No data available	No data available	No data available	No data available
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	No data available	No data available	No data available	No data available
alkyl polyglucoside	No data available	No data available	No data available	595000

## 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)
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine	No data available	No data available	No data available	No data available
propane-1,2-diol	No data available	No data available	No data available	No data available
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	No data available	No data available	No data available	No data available
alkyl polyglucoside	No data available	No data available	No data available	357000

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
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine	No data available	No data available	No data available	No data available
propane-1,2-diol	No data available	No data available	10	168
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	No data available	No data available	No data available	No data available
alkyl polyglucoside	No data available	No data available	No data available	420

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
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine	No data available	No data available	No data available	No data available
propane-1,2-diol	No data available	No data available	10	50
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	No data available	No data available	No data available	No data available
alkyl polyglucoside	No data available	No data available	No data available	124

## 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)
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine	No data available	No data available	No data available	No data available
propane-1,2-diol	260	26	183	20000
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	No data available	No data available	No data available	No data available
alkyl polyglucoside	0.176	0.018	0.0295	5000

## Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m <sup>3</sup> )
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine	No data available	No data available	No data available	No data available
propane-1,2-diol	572	57.2	50	No data available
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	No data available	No data available	No data available	No data available
alkyl polyglucoside	1.516	0.065	0.654	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:** 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).

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<b>Hand protection:</b>	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.
<b>Body protection:</b>	No special requirements under normal use conditions.
<b>Respiratory protection:</b>	No special requirements under normal use conditions.
<b>Environmental exposure controls:</b>	No special requirements under normal use conditions.

*Recommended safety measures for handling the diluted product:*

**Recommended maximum concentration (%):** 0.08

<b>Appropriate engineering controls:</b>	No special requirements under normal use conditions.
<b>Appropriate organisational controls:</b>	No special requirements under normal use conditions.

**Personal protective equipment**

<b>Eye / face protection:</b>	No special requirements under normal use conditions.
<b>Hand protection:</b>	Rinse and dry hands after use. For prolonged contact protection for the skin may be necessary.
<b>Body protection:</b>	No special requirements under normal use conditions.
<b>Respiratory protection:</b>	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, Yellow  
**Odour:** Slightly perfumed  
**Odour threshold:** Not applicable  
**pH:** ≈ 8 (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)
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine	No data available		
propane-1,2-diol	185-190	Method not given	1013
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	No data available		
alkyl polyglucoside	> 100	Method not given	1013

#### Method / remark

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

Substance data, flammability or explosive limits, if available:

Ingredient(s)	Lower limit (% vol)	Upper limit (% vol)
propane-1,2-diol	2.6	12.6

#### Method / remark

**Vapour pressure:** Not determined

Substance data, vapour pressure

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Ingredient(s)	Value (Pa)	Method	Temperature (°C)
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine	No data available		
propane-1,2-diol	18.6	Method not given	20
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	No data available		
alkyl polyglucoside	< 0.0077	Method not given	20

## Method / remark

**Vapour density:** Not determined

**Relative density:** 1.05 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)
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine	No data available		
propane-1,2-diol	Soluble	Method not given	
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	No data available		
alkyl polyglucoside	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 determined

**Viscosity:** ≈ 270 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

Weight of evidence

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

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):

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)
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine	LD <sub>50</sub>	300 - 2000	Rat	Read across	
propane-1,2-diol	LD <sub>50</sub>	> 10000	Rat	Method not given	

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Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt		No data available			
alkyl polyglucoside	LD <sub>50</sub>	> 2000		OECD 401 (EU B.1)	

## Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine		No data available			
propane-1,2-diol	LD <sub>50</sub>	> 2000	Rabbit	Method not given	
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt		No data available			
alkyl polyglucoside	LD <sub>50</sub>	> 2000	Rabbit	OECD 402 (EU B.3)	

## Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine		No data available			
propane-1,2-diol		No data available			
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt		No data available			
alkyl polyglucoside		No data available			

## Irritation and corrosivity

## Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine	Irritant	Rabbit	OECD 404 (EU B.4)	
propane-1,2-diol	Not irritant	Rabbit	OECD 404 (EU B.4)	
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	No data available			
alkyl polyglucoside	Irritant		OECD 404 (EU B.4)	

## Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine	Severe damage	Rabbit	Method not given	
propane-1,2-diol	Not corrosive or irritant	Rabbit	OECD 405 (EU B.5)	
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	No data available			
alkyl polyglucoside	Severe damage		OECD 405 (EU B.5)	

## Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine	No data available			
propane-1,2-diol	No data available			
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	No data available			
alkyl polyglucoside	No data available			

## Sensitisation

## Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	
propane-1,2-diol	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	No data available			
alkyl polyglucoside	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	

## Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine	No data available			
propane-1,2-diol	No data available			
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	No data available			
alkyl polyglucoside	No data available			

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

## Carcinogenicity

Ingredient(s)	Effect
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine	No data available
propane-1,2-diol	No evidence for carcinogenicity, negative test results
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	No data available
alkyl polyglucoside	No evidence for carcinogenicity, weight-of-evidence

## Mutagenicity

Ingredient(s)	Result (in-vitro)	Method (in-vitro)	Result (in-vivo)	Method (in-vivo)
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13)	No data available	
propane-1,2-diol	No evidence for mutagenicity, negative test results	Method not given	No data available	
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	No data available		No data available	
alkyl polyglucoside	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13) OECD 473	No evidence for mutagenicity, negative test results	OECD 474 (EU B.12)

## Toxicity for reproduction

Ingredient(s)	Endpoint	Specific effect	Value (mg/kg bw/d)	Species	Method	Exposure time	Remarks and other effects reported
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine			No data available				
propane-1,2-diol			No data available				No evidence for reproductive toxicity
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt			No data available				
alkyl polyglucoside	NOAEL	Developmental toxicity Maternal toxicity	1000	Rat	OECD 414 (EU B.31), oral OECD 421, oral		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
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine		No data available				
propane-1,2-diol		No data available				
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt		No data available				
alkyl polyglucoside	NOAEL	100	Rat	OECD 408 (EU B.26)		

## Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine		No data available				
propane-1,2-diol		No data available				
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt		No data available				
alkyl polyglucoside		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
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine		No data available				
propane-1,2-diol		No data available				
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt		No data available				
alkyl polyglucoside		No data available				

## Chronic toxicity



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Ingredient(s)	Exposure route	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time	Specific effects and organs affected	Remark
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine			No data available					
propane-1,2-diol			No data available					
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt			No data available					
alkyl polyglucoside			No data available					

## STOT-single exposure

Ingredient(s)	Affected organ(s)
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine	No data available
propane-1,2-diol	No data available
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	No data available
alkyl polyglucoside	No data available

## STOT-repeated exposure

Ingredient(s)	Affected organ(s)
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine	No data available
propane-1,2-diol	No data available
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	No data available
alkyl polyglucoside	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)
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine	LC <sub>50</sub>	> 1 - 10	<i>Cyprinus carpio</i>	OECD 203, flow-through	96
propane-1,2-diol	LC <sub>50</sub>	> 1000	<i>Fish</i>	Method not given	24
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt		No data available			
alkyl polyglucoside	LC <sub>50</sub>	1 - 10	<i>Fish</i>	ISO 7346	

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine	EC <sub>50</sub>	> 1 - 10	<i>Daphnia magna Straus</i>	OECD 202, static	48
propane-1,2-diol	EC <sub>50</sub>	> 100	<i>Daphnia</i>	Method not given	48
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt		No data available			
alkyl polyglucoside	EC <sub>50</sub>	7	<i>Daphnia magna Straus</i>	Method not given	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine	EC <sub>50</sub>	> 10 - 100	<i>Desmodesmus subspicatus</i>	OECD 201, static	72
propane-1,2-diol	EC <sub>50</sub>	24200	<i>Desmodesmus subspicatus</i>	OECD 201	72

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Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt		No data available		
alkyl polyglucoside	EC <sub>50</sub>	10 - 100	Not specified	88/302/EEC, Part C, static

## Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine		No data available			
propane-1,2-diol		No data available			
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt		No data available			
alkyl polyglucoside		No data available			

## Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine		No data available			
propane-1,2-diol	EC <sub>0</sub>	> 20000	<i>Pseudomonas putida</i>	Method not given	18 hour(s)
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt		No data available			
alkyl polyglucoside	EC <sub>0</sub>	> 100	<i>Bacteria</i>	OECD 209	

## Aquatic long-term toxicity

## Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine		No data available				
propane-1,2-diol		No data available				
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt		No data available				
alkyl polyglucoside	NOEC	1 - 10	Not specified	OECD 204	14 day(s)	

## Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine		No data available				
propane-1,2-diol	NOEC	13020	<i>Ceriodaphnia dubia</i>	Method not given	7 day(s)	
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt		No data available				
alkyl polyglucoside	NOEC	1 - 10	<i>Daphnia sp.</i>	OECD 202		

## 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
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine		No data available				
propane-1,2-diol		No data available				
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt		No data available				
alkyl polyglucoside		No data available				

## Terrestrial toxicity

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

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:

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Abiotic degradation - other processes, if available:

**Biodegradation**

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT <sub>50</sub>	Method	Evaluation
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine	Activated sludge, aerobe	Method not given	> 60 % in 28 day(s)	OECD 301A OECD 301B	Readily biodegradable
propane-1,2-diol			> 70 % in 28 day(s)	OECD 301A	Readily biodegradable
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt					No data available
alkyl polyglucoside			88% in 28 day(s)	OECD 301E	Readily biodegradable

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
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine	No data available			
propane-1,2-diol	-1.07	Method not given	No bioaccumulation expected	
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	No data available			
alkyl polyglucoside	=< 0.07	Method not given	No bioaccumulation expected	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine	No data available				
propane-1,2-diol	No data available				
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	No data available				
alkyl polyglucoside	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
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine	No data available				
propane-1,2-diol	No data available				Potential for mobility in soil, soluble in water
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	No data available				
alkyl polyglucoside	1.7		Method not given		

**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:**

**European Waste Catalogue:**

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.  
20 01 29\* - detergents containing dangerous substances.

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**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

&gt;=30%

non-ionic surfactants

&lt; 5%

perfumes, Limonene

**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:** MSDS3346**Version:** 10.0**Revision:** 2014-09-04**Reason for revision:**

Overall design adjusted in accordance with Amendment 453/2010, Annex II of Regulation (EC) No 1907/2006

**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:**

- H302 - Harmful if swallowed
- H315 - Causes skin irritation
- H318 - Causes serious eye damage
- H412 - Harmful to aquatic life with long lasting effects
- R22 - Harmful if swallowed.
- R38 - Irritating to skin.
- R41 - Risk of serious damage to eyes.

**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**