

Safety Data Sheet

According to Regulation (EC) No 1907/2006

Suma Multipurpose Cleaner D2.3

Revision: 2014-02-06 *Version: 02*

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

1.1 Product identifier

Trade name: Suma Multipurpose Cleaner D2.3

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

AISE-P303 - Kitchen cleaner. Manual process

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

AISE-P312 - Glass cleaner. Manual process

AISE-P313 - Glass cleaner. Spray and wipe manual process

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

1.3 Details of the supplier of the safety data sheet

Diversey Ltd

Contact details

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 Directive 1999/45/EC and corresponding national legislation.

Indication of danger

Xi - Irritant

Risk phrases:

R41 - Risk of serious damage to eyes.

2.2 Label elements



Xi - Irritant

Risk phrases:

R41 - Risk of serious damage to eyes.

Safety phrases:

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S39 - Wear eye/face protection.

Further indications on the label:

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

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 (EC) 1272/2008	Notes	Weight percent
propane-1,2-diol	200-338-0	57-55-6	01-2119456809-23	-	-		10-20
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	931-292-6	-	01-2119490061-47	Xn;R22 Xi;R38-41 N;R50	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Aquatic Acute 1 (H400) Aquatic Chronic 2 (H411)		3-10
cocoamidopropyl betaine hydrogenated	604-575-4 931-513-6 931-296-8	-	01-2119489410-39 01-2119513359-38 01-2119488533-30	Xi;R41	Eye Dam. 1 (H318)		3-10
alkyl polyglucoside	500-220-1	68515-73-1	01-2119488530-36	Xi;R41	Eye Dam. 1 (H318)		1-3

^{*} 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 . Remove from source of exposure. Get medical attention.

Not required under normal use. Rinse with plenty of water. If irritation develops get medical Skin contact:

Eye contact: Wash off immediately with plenty of water. Get medical attention immediately.

Remove material from mouth. Immediately drink 1-2 glasses of water or milk. Get medical attention. Ingestion:

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: Causes irritation.

Skin contact: Unlikely to be irritant in normal use.

Eye contact: Causes severe irritation. Ingestion: Causes irritation. Sensitisation: No known effects.

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

SECTION 5: Firefighting measures

5.1 Extinguishing media

Carbon dioxide. Dry powder. Water spray jet. Fight larger fires with water spray jet or alcohol-resistant foam.

5.2 Special hazards arising from the substance or mixture

No special hazards known.

5.3 Advice for firefighters

As in any fire, wear self contained breathing apparatus and suitable protective clothing including gloves and eye/face protection.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear eye/face protection.

6.2 Environmental precautions

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

6.3 Methods and material for containment and cleaning up

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

6.4 Reference to other sections

For personal protective equipment see subsection 8.2. For disposal considerations see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling:

Handle in accordance with good industrial hygiene and safety practice. Do not mix with other products unless advised by Diversey. For advice on general occupational hygiene see subsection 8.2. For environmental exposure controls see subsection 8.2. For incompatible materials see subsection 10.5.

Prevention of fire and explosion:

No special precautions required.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms / facilities:

In accordance with local and national regulations.

Combined storage in storage rooms / facilities:

In accordance with local and national regulations. For incompatible materials see subsection 10.5.

Basic storage conditions

Store in original container. Keep container tightly closed. For conditions to avoid see subsection 10.4.

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	450 ppm total
	particulate and vapour	particulate and vapour
	474 mg/m³ total	1422 mg/m ³ total
	particulate and vapour	particulate and vapour
	10 mg/m3 particulate	30 mg/m ³ 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)

DIVEL of all exposure - Consumer (mg/kg bw)				
Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
propane-1,2-diol	No data available	No data available	No data available	No data available
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	No data available	No data available	No data available	0.44
cocoamidopropyl betaine hydrogenated	No data available	No data available	No data available	7.5
alkyl polyglucoside	No data available	No data available	No data available	35.7

DNEL dermal exposure - Worker

Ingredient(s)	Short term - Local	Short term - Systemic	Long term - Local	Long term - Systemic
	effects	effects (mg/kg bw)	effects	effects (mg/kg bw)
propane-1,2-diol	No data available	No data available	No data available	No data available
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	No data available	No data available	0.27 %	11
cocoamidopropyl betaine hydrogenated	No data available	No data available	No data available	12.5
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)
propane-1,2-diol	No data available	No data available	No data available	No data available
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	No data available	No data available	0.27 %	5.5
cocoamidopropyl betaine hydrogenated	No data available	No data available	No data available	7.5
alkyl polyglucoside	No data available	No data available	No data available	357000

DNEL inhalatory exposure - Worker (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
propane-1,2-diol	No data available	No data available	10	168
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	No data available	No data available	No data available	15.5
cocoamidopropyl betaine hydrogenated	No data available	No data available	No data available	44
alkyl polyglucoside	No data available	No data available	No data available	420

DNEL inhalatory exposure - Consumer (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
propane-1,2-diol	No data available	No data available	10	50
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	No data available	No data available	No data available	3.825
cocoamidopropyl betaine hydrogenated	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)
propane-1,2-diol	260	26	183	20000
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	0.0335	0.00335	0.0335	24
cocoamidopropyl betaine hydrogenated	0.0135	0.00135	No data available	3000
alkyl polyglucoside	0.176	0.0176	0.27	560

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m³)
propane-1,2-diol	572	57.2	50	No data available
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	5.24	0.524	1.02	No data available
cocoamidopropyl betaine hydrogenated	1	0.1	0.8	No data available
alkyl polyglucoside	1.516	0.152	0.654	No data available

8.2 Exposure controls

General health and safety measures

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Wash hands before breaks and at the end of workday. Avoid contact with eyes.

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 <u>undiluted</u> product:

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: 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 (%): 0.53

Appropriate engineering controls:

Appropriate organisational controls:

No special requirements under normal use conditions.

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, Blue 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)
propane-1,2-diol	185-190	Method not given	1013
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	> 100	Method not given	
cocoamidopropyl betaine hydrogenated	100	Method not given	
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 determined

Upper/lower flammability limit (%): Not determined

Substance data, flammability or explosive limits, if available

•	bubstance data, naminability of explosive limits, if available.		
	Ingredient(s)	Lower limit (% vol)	Upper limit (% vol)
Ī	propane-1,2-diol	2.6	12.6

Method / remark

Vapour pressure: Not determined

Substance data, vapour pressure

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
propane-1,2-diol	18.6	Method not given	20
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	< 10	Method not given	25
cocoamidopropyl betaine hydrogenated	2300	Method not given	20
alkyl polyglucoside	No data available		

Method / remark

Vapour density: Not determined Relative density: 1.02 g/cm³ (20°C)

Solubility in / Miscibility with Water: Fully miscible

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
propane-1,2-diol	Soluble	Method not given	
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	409.5 Soluble	Method not given	20
cocoamidopropyl betaine hydrogenated	> 250 - 900 Soluble	Method not given	20
alkyl polyglucoside	Soluble	Method not given	20

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

Method / remark

Autoignition temperature: Not determined Decomposition temperature: Not determined

Viscosity: Not determined

Explosive properties: Not explosive. **Oxidising properties:** Not oxidising.

9.2 Other information

Surface tension (N/m): Not determined

Corrosion to metals

(according to IMDG/ADR regulation): Not determined

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

Mixtures

No test data is available on the mixture

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)
propane-1,2-diol	LD 50	> 10000	Rat	Method not given	
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	LD 50	> 300 - 2000	Rat	OECD 401 (EU B.1)	
cocoamidopropyl betaine hydrogenated	LD 50	2430	Rat	Method not given	
alkyl polyglucoside	LD 50	> 2000	Rat	OECD 423 (EU B.1 tris)	

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
propane-1,2-diol	LD 50	> 2000	Rabbit	Method not given	
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	LD 50	> 5000	Rat	OECD 402 (EU B.3)	
cocoamidopropyl betaine hydrogenated	LD 50	> 5000	Rat	OECD 402 (EU B.3)	
alkyl polyglucoside	LD 50	> 2000	Rabbit	OECD 402 (EU B.3)	

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
propane-1,2-diol		No data available			
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides		No data available			
cocoamidopropyl betaine hydrogenated	LC 50	> 5 (mist)	Rat	Method not given	4
alkyl polyglucoside		No data available			

Irritation and corrosivity Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
propane-1,2-diol	Not irritant	Rabbit	OECD 404 (EU B.4)	
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	Irritant	Rabbit	OECD 404 (EU B.4)	
cocoamidopropyl betaine hydrogenated	Not irritant	Rabbit	OECD 404 (EU B.4)	
alkyl polyglucoside	Not irritant	Rabbit	OECD 404 (EU B.4)	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
propane-1,2-diol	Not corrosive or irritant	Rabbit	OECD 405 (EU B.5)	
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	Severe damage	Rabbit	OECD 405 (EU B.5)	
cocoamidopropyl betaine hydrogenated	Severe damage	Rabbit	OECD 405 (EU B.5)	
alkyl polyglucoside	Severe damage	Rabbit	OECD 405 (EU B.5)	

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
propane-1,2-diol	No data available			
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	No data available			
cocoamidopropyl betaine hydrogenated	No data available			
alkyl polyglucoside	No data available			

Sensitisation ensitisation by skin contact

Conditional by Stair Contact				
Ingredient(s)	Result	Species	Method	Exposure time (h)

propane-1,2-diol	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	Not sensitising	Guinea pig	OECD 406 (EU B.6) / Buehler test	
cocoamidopropyl betaine hydrogenated	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	
alkyl polyglucoside	Not sensitising	Guinea pig	OECD 406 (EU B.6) / Buehler test	

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
propane-1,2-diol	No data available			
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	No data available			
cocoamidopropyl betaine hydrogenated	No data available			
alkyl polyglucoside	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
propane-1,2-diol		No data available				
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	NOAEL	13		OECD 422, oral		
cocoamidopropyl betaine hydrogenated	NOAEL	300	Rat	OECD 408 (EU B.26)	90	
alkyl polyglucoside	NOAEL	100	Rat	OECD 408 (EU B.26)	90	

Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
propane-1,2-diol		No data available				
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides		No data available				
cocoamidopropyl betaine hydrogenated		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
propane-1,2-diol		No data available			(auye)	
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides		No data available				
cocoamidopropyl betaine hydrogenated		No data available				
alkyl polyglucoside		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
propane-1,2-diol			No data available					
Amines, C12-14 (even numbered)-alkyldimeth yl, N-oxides			No data available					
cocoamidopropyl betaine hydrogenated			No data available					
alkyl polyglucoside			No data available					

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Mixture data:

Based on available data, the classification criteria are not met.

Substance data, where relevant and available:

Carcinogenicity

Ingredient(s)	Effect
propane-1,2-diol	No evidence for carcinogenicity, negative test results
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	No evidence for carcinogenicity, negative test results
cocoamidopropyl betaine hydrogenated	No evidence for carcinogenicity, weight-of-evidence
alkyl polyglucoside	No evidence for carcinogenicity, weight-of-evidence

Mutagenicity

Ingredient(s)	Result (in-vitro)	Method (in-vitro)	Result (in-vivo)	Method (in-vivo)
	No evidence for mutagenicity, negative test results	Method not given	No data available	
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13)	No data available	
cocoamidopropyl betaine hydrogenated		OECD 471 (EU B.12/13) OECD 476		OECD 474 (EU B.12)
alkyl polyglucoside	No evidence for mutagenicity, negative test results	Read across	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
propane-1,2-diol			No data available				No evidence for reproductive toxicity
Amines, C12-14 (even numbered)-alkyldimeth yl, N-oxides		Teratogenic effects	25	Rat	Non guideline test		
cocoamidopropyl betaine hydrogenated	NOEL	Developmental toxicity	300	Rat	OECD 414 (EU B.31), oral		
alkyl polyglucoside			No data available		OECD 416, (EU B.35), oral		No evidence for reproductive toxicity

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

Mixtures

No test 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)
propane-1,2-diol	LC 50	> 1000	Fish	Method not given	24
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	LC 50	> 2.67 - 3.46	Fish	OECD 203, static	96
cocoamidopropyl betaine hydrogenated	LC 50	1.11	Fish	OECD 203, semi-static	96
alkyl polyglucoside	LC 50	100.81	Brachydanio rerio	ISO 7346	96

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
propane-1,2-diol	EC 50	> 100	Daphnia	Method not given	48
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	EC 50	3.1	Daphnia magna Straus	OECD 202	48
cocoamidopropyl betaine hydrogenated	EC 50	1.9	Daphnia	OECD 202, static	48
alkyl polyglucoside	EC 50	> 100	Daphnia magna Straus	OECD 202	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
propane-1,2-diol	EC 50	24200	Desmodesmus subspicatus	OECD 201	72
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	EC 50	0.1428	Not specified	Method not given	72
cocoamidopropyl betaine hydrogenated	Er C 50	2.4	Not specified	Method not given	72
alkyl polyglucoside	EC 50	27.22	Desmodesmus subspicatus	Method not given	72

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
propane-1,2-diol		No data			
		available			
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides		No data			
		available			

cocoamidopropyl betaine hydrogenated	ErC 50	0.74	Skeletonema costatum	ISO 10253	72
			Phaeodactylum tricornutum		
alkyl polyglucoside	EC 50	12.43	Skeletonema costatum	Method not given	3

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
propane-1,2-diol	EC o	> 20000	Pseudomonas putida	Method not given	18 hour(s)
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	EC 10	> 24	Bacteria	Non guideline test	18 hour(s)
cocoamidopropyl betaine hydrogenated	EC 50	3000	Bacteria	ISO 13641 (2003), anaerobic	16 hour(s)
alkyl polyglucoside	EC 10	> 560	Pseudomonas putida	Method not given	6 hour(s)

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
propane-1,2-diol		No data available				
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	NOEC	0.42	Not specified		302 day(s)	
cocoamidopropyl betaine hydrogenated	NOEC	0.135	Oncorhynchus mykiss	OECD 210	100 day(s)	
alkyl polyglucoside	NOEC	1	Brachydanio rerio	Method not given	28 day(s)	

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
propane-1,2-diol	NOEC	13020	Ceriodaphnia dubia	Method not given	7 day(s)	
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	NOEC	0.7	Daphnia magna	Method not given	21 day(s)	
cocoamidopropyl betaine hydrogenated	NOEC	0.3	Daphnia magna	OECD 211	21 day(s)	
alkyl polyglucoside	NOEC	1	Daphnia magna	OECD 202	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
propane-1,2-diol		No data available				
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides		No data available				
cocoamidopropyl betaine hydrogenated		No data available				
alkyl polyglucoside		No data available				

Terrestrial toxicityTerrestrial 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:

Abiotic degradation - other processes, if available:

Biodegradation

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT 50	Method	Evaluation
propane-1,2-diol			> 70 % in 28 day(s)	OECD 301A	Readily biodegradable

Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	CO ₂ production	90% in 28 day(s)	OECD 301B	Readily biodegradable
cocoamidopropyl betaine hydrogenated		95 % in 28 day(s)	Method not given	Readily biodegradable
alkyl polyglucoside		59%	OECD 301C	Readily biodegradable

Ready biodegradability - anaerobic and marine conditions, if available:

Ingredient(s)	Medium & Type	Analytical method	DT 50	Method	Evaluation
cocoamidopropyl betaine hydrogenated			76% in 28 day(s)	OECD 306	Readily biodegradable

Degradation in relevant environmental compartments, if available:

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
propane-1,2-diol	-1.07	Method not given	No bioaccumulation expected	
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	0.93	(EC) 440/2008, A.8	No bioaccumulation expected	
cocoamidopropyl betaine hydrogenated	4.2	Method not given	Low potential for bioaccumulation	
alkyl polyglucoside	0.07	Method not given	No bioaccumulation expected	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
propane-1,2-diol	No data available				
Amines, C12-14 (even numbered)-alkyldimeth yl, N-oxides					
cocoamidopropyl betaine hydrogenated	3 - 71		Method not given	Low potential for bioaccumulation	
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
propane-1,2-diol	No data available				Potential for mobility in soil, soluble in water
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	No data available				Low mobillity in soil
cocoamidopropyl betaine hydrogenated	No data available				Potential for mobility in soil, soluble in water
alkyl polyglucoside	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.

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

amphoteric surfactants 5 - 15% non-ionic surfactants < 5% perfumes, Linalool, Geraniol

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: MSDS7439 Version: 02 Revision: 2014-02-06

Reason for revision:

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

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

- R50 Very toxic to aquatic organisms.
 R41 Risk of serious damage to eyes.
- R38 Irritating to skin.
 R22 Harmful if swallowed.
- · H302 Harmful if swallowed.
- · H315 Causes skin irritation.
- H318 Causes serious eye damage
- H400 Very toxic to aquatic life.
 H411 Toxic to aquatic life with long lasting effects.

- Abbreviations and acronyms:
 AISE The international Association for Soaps, Detergents and Maintenance Products
- DNEL Derived No Effect Limit
- EUH CLP Specific hazard statement
- PBT Persistent, Bioaccumulative and Toxic
- PNEC Predicted No Effect Concentration
- REACH number REACH registration number, without supplier specific part
- vPvB very Persistent and very Bioaccumulative

End of Safety Data Sheet