

Safety Data Sheet

According to Regulation (EC) No 1907/2006

Suma Star Des D1.55

Revision: 2017-09-09 Version: 02.0

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

1.1 Product identifier

Trade name: Suma Star Des D1.55

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

Identified uses:

For professional and industrial use only.

AISE-P314 - Surface disinfectant. Manual process

AISE-P315 - Surface disinfectant. Spray and rinse manual process

AISE-P301 - General purpose cleaner. Manual process

AISE-P302 - General purpose cleaner. Spray and wipe manual process

AISE-P806 - Foam cleaner. Semi-automatic with venting process

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

Contact details

Diversey Ltd

Weston Favell Centre, Northampton NN3 8PD, United Kingdom

Tel: 01604 405311, Fax: 01604 406809

Regulatory Email: customerservice.uk@diversey.com

1.4 Emergency telephone number

For medical or environmental emergency only:

call 0800 052 0185

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Aquatic Chronic 3 (H412) Met. Corr. 1 (H290)

2.2 Label elements



Signal word: Danger.

Contains cocoamidopropyl betaine hydrogenated (Cocamidopropyl Betaine), N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine (Laurylamine Dipropylenediamine), Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides (Lauramine Oxide).

Hazard statements:

H315 - Causes skin irritation.

H318 - Causes serious eye damage.

H412 - Harmful to aquatic life with long lasting effects.

H290 - May be corrosive to metals.

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

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Ingredient(s)	EC number	CAS number	REACH number	Classification	Notes	Weight
						percent
cocoamidopropyl betaine hydrogenated	604-575-4	-	01-2119489410-39	Eye Dam. 1 (H318)		3-10
	931-513-6		01-2119513359-38	Aquatic Chronic 3		
	931-296-8		01-2119488533-30	(H412)		
alkyl polyglucoside	600-975-8	110615-47-9	01-2119489418-23	Skin Irrit. 2 (H315)		1-3
				Eye Dam. 1 (H318)		
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	219-145-8	2372-82-9	01-2119980592-29	Acute Tox. 3 (H301)		1-3
				Skin Corr. 1A (H314)		
				STOT RE 2 (H373)		
				Aquatic Acute 1 (H400)		
				Aquatic Chronic 1		
				(H410)		

Eve contact:

Inaestion:

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.

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

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation: Get medical attention or advice if you feel unwell.

Wash skin with plenty of lukewarm, gently flowing water. Take off immediately all contaminated Skin contact:

clothing and wash it before re-use. If skin irritation occurs: Get medical advice or attention. Hold eyelids apart and flush eyes with plenty of lukewarm water for at least 15 minutes. Remove

contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE, doctor or physician.

Rinse mouth. Immediately drink 1 glass of water. Never give anything by mouth to an unconscious

person. Get medical attention or advice if you feel unwell.

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. No known effects or symptoms in normal use. Ingestion:

4.3 Indication of any immediate medical attention and special treatment needed

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

SECTION 5: Firefighting measures

5.1 Extinguishing media

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

5.2 Special hazards arising from the substance or mixture

No special hazards known.

5.3 Advice for firefighters

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

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear eye/face protection.

6.2 Environmental precautions

Do not allow to enter drainage system, surface or ground water. 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 adviced by Diversey. Wash hands before breaks and at the end of workday. Wash face, hands and any exposed skin thoroughly after handling. Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. Use personal protective equipment as required. Avoid contact with eyes. Use only with adequate ventilation. See chapter 8.2, Exposure controls / Personal protection.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local and national regulations. Store in a closed container. Keep only in original container. Keep from freezing. 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:

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
cocoamidopropyl betaine hydrogenated	-	-	-	7.5
alkyl polyglucoside	-	-	-	35.7
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	-	-	-	0.2

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)
cocoamidopropyl betaine hydrogenated	No data available	-	No data available	12.5
alkyl polyglucoside	No data available	-	No data available	595000
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	-	-	-	0.91

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)
cocoamidopropyl betaine hydrogenated	No data available	-	No data available	7.5
alkyl polyglucoside	No data available	-	No data available	357000
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	-	-	-	0.54

DNEL inhalatory exposure - Worker (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
cocoamidopropyl betaine hydrogenated	-	-	-	44
alkyl polyglucoside	-	-	-	420
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	No data available	No data available	No data available	2.35

DNEL inhalatory exposure - Consumer (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
cocoamidopropyl betaine hydrogenated	-	-	-	-
alkyl polyglucoside	-	-	-	124
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	No data available	No data available	No data available	0.7

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)
cocoamidopropyl betaine hydrogenated	0.0135	0.00135	-	3000
alkyl polyglucoside	0.176	0.018	0.0295	5000
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	0.001	0.0001	0.00015	1.33

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m³)
cocoamidopropyl betaine hydrogenated	1	0.1	0.8	-
alkyl polyglucoside	1.516	0.065	0.654	-
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	8.5	0.85	45.34	-

8.2 Exposure controls

The following information applies for the uses indicated in subsection 1.2 of the Safety Data Sheet. If available, please refer to the product information sheet for application and handling instructions. Normal use conditions are assumed for this section.

Recommended safety measures for handling the undiluted product:

Covering activities such as filling and transfer of product to application equipment, flasks or buckets

Appropriate engineering controls: If the product is diluted by using specific dosing systems with no risk of splashes or direct skin

contact, the personal protection equipment as described in this section is not required.

Appropriate organisational controls: Avoid direct contact and/or splashes where possible. Train personnel.

Personal protective equipment

Eye / face protection: Safety glasses or goggles (EN 166).

Hand protection: Chemical-resistant protective gloves (EN 374). Verify instructions regarding permeability and

breakthrough time, as provided by the gloves supplier. Consider specific local use conditions, such

as risk of splashes, cuts, contact time and temperature.

Suggested gloves for prolonged contact: Material: butyl rubber Penetration time: >= 480 min

Material thickness: >= 0.7 mm

Suggested gloves for protection against splashes: Material: nitrile rubber Penetration time: >= 30

min Material thickness: >= 0.4 mm

In consultation with the supplier of protective gloves a different type providing similar protection may

be chosen.

Body protection:No special requirements under normal use conditions. **Respiratory protection:**No special requirements under normal use conditions.

Environmental exposure controls: Should not reach sewage water or drainage ditch undiluted or unneutralised.

Recommended safety measures for handling the diluted product:

Recommended maximum concentration (%): 2

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.
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: ≈ 10 (neat) ISO 4316

Melting point/freezing point (°C): Not determined Not relevant to classification of this product

Initial boiling point and boiling range (°C): Not determined See substance data

Substance data, boiling point

Ingredient(s)	Value	Method	Atmospheric pressure

	(°C)		(hPa)
cocoamidopropyl betaine hydrogenated	100	Method not given	
alkyl polyglucoside	> 100	Method not given	1013
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	No data available		

Method / remark

Flash point (°C): Not applicable. Sustained combustion: Not applicable. (UN Manual of Tests and Criteria, section 32, L.2)

Evaporation rate: Not determined Flammability (solid, gas): Not applicable to liquids

Flammability (solid, gas): Not applicable to liquids Upper/lower flammability limit (%): Not determined

Substance data, flammability or explosive limits, if available:

Not relevant to classification of this product

Method / remark

See substance data

Substance data, vapour pressure

Vapour pressure: Not determined

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
cocoamidopropyl betaine hydrogenated	.?	Method not given	20
alkyl polyglucoside	< 0.0077	Method not given	20
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	No data available		

Method / remark

Not relevant to classification of this product

OECD 109 (EU A.3)

Vapour density: Not determined

Relative density: ≈ 1.09 (20 °C) Solubility in / Miscibility with Water: Fully miscible

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
cocoamidopropyl betaine hydrogenated	> .? Soluble	Method not given	20
alkyl polyglucoside	No data available		
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	Soluble		

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

Method / remark

Autoignition temperature: Not determined **Decomposition temperature:** Not applicable.

Viscosity: Not determined

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

Not relevant to classification of this product

9.2 Other information

Surface tension (N/m): Not determined

Corrosion to metals: Corrosive

Not relevant to classification of this product 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

Reacts with acids.

10.6 Hazardous decomposition products

None known under normal storage and use conditions.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Mixture data:.

Relevant calculated ATE(s):

ATE - Oral (mg/kg): >2000

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)
cocoamidopropyl betaine hydrogenated	LD 50	2430	Rat	Method not given	
alkyl polyglucoside	LD 50	> 2000		OECD 401 (EU B.1)	
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	LD 50	261	Rat	Method not given	

Acute dermal toxicity

Ingredient(s)		Value (mg/kg)	Species	Method	Exposure time (h)
cocoamidopropyl betaine hydrogenated	LD 50	> 5000	Rat	OECD 402 (EU B.3)	
alkyl polyglucoside	LD 50	> 2000	Rabbit	OECD 402 (EU B.3)	
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	LD 50	> 2000	Rat	OECD 402 (EU B.3)	

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
cocoamidopropyl betaine hydrogenated	LC 50	> 5 (mist)	Rat	Method not given	4
alkyl polyglucoside		No data			
		available			
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine		No data			
		available			

Irritation and corrosivity

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
cocoamidopropyl betaine hydrogenated	Not irritant	Rabbit	OECD 404 (EU B.4)	
alkyl polyglucoside	Irritant		OECD 404 (EU B.4)	
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	Corrosive	Rabbit	OECD 404 (EU B.4)	4 hour(s)

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
cocoamidopropyl betaine hydrogenated	Severe damage	Rabbit	OECD 405 (EU B.5)	
alkyl polyglucoside	Severe damage		OECD 405 (EU B.5)	
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	No data available			

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
cocoamidopropyl betaine hydrogenated	No data available			
alkyl polyglucoside	No data available			
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	No data available			

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
cocoamidopropyl betaine hydrogenated	Not sensitising	Guinea pig	Guinea pig OECD 406 (EU B.6) /	
			GPMT	
alkyl polyglucoside	Not sensitising	Guinea pig	OECD 406 (EU B.6) /	
·			GPMT	
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	Not sensitising	Guinea pig	OECD 406 (EU B.6) /	
	_		Buehler test	

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
cocoamidopropyl betaine hydrogenated	No data available			
alkyl polyglucoside	No data available			
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	No data available			

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Mutagenicity

Ingredient(s)	Result (in-vitro)		Result (in-vivo)	Method
		(in-vitro)		(in-vivo)
cocoamidopropyl betaine hydrogenated	No evidence for mutagenicity, negative	OECD 471 (EU	No evidence for mutagenicity, negative	OECD 474 (EU
	test results	B.12/13) OECD	test results	B.12)
		476		
alkyl polyglucoside	No evidence for mutagenicity, negative	OECD 471 (EU	No evidence for mutagenicity, negative	OECD 474 (EU
	test results	B.12/13) OECD	test results	B.12)
		473		
N-(3-aminopropyl)-N-dodecylpropane-1,3-diami	No evidence for mutagenicity, negative	OECD 471 (EU	No data available	
ne	test results	B.12/13) OECD		
		473 OECD 476		

Carcinogenicity

Ingredient(s)	Effect
cocoamidopropyl betaine hydrogenated	No evidence for carcinogenicity, weight-of-evidence
alkyl polyglucoside	No evidence for carcinogenicity, weight-of-evidence
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	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
cocoamidopropyl betaine hydrogenated	NOEL	Developmental toxicity	300	Rat	OECD 414 (EU B.31), oral		
alkyl polyglucoside	NOAEL	Developmental toxicity Maternal toxicity	1000	Rat	OECD 414 (EU B.31), oral OECD 421, oral		No evidence for reproductive toxicity
N-(3-aminopropyl)-N-do decylpropane-1,3-diami ne			No data available				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
cocoamidopropyl betaine hydrogenated	NOAEL	300	Rat	OECD 408 (EU B.26)	90	
alkyl polyglucoside	NOAEL	100	Rat	OECD 408 (EU B.26)		
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine		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
cocoamidopropyl betaine hydrogenated		No data available				
alkyl polyglucoside		No data available				
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine		No data				

Sub-chronic inhalation toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
cocoamidopropyl betaine hydrogenated		No data				
		available				
alkyl polyglucoside		No data				
· ·		available				
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine		No data				
		available				

Chronic toxicity

Childric toxicity								
Ingredient(s)	Exposure	Endpoint	Value	Species	Method	Exposure	Specific effects and	Remark
	route		(mg/kg bw/d)			time	organs affected	
cocoamidopropyl			No data					
betaine hydrogenated			available					
alkyl polyglucoside			No data					
			available					
N-(3-aminopropyl)-N-do			No data					
decylpropane-1,3-diami			available					
ne								

STOT-single exposure

Ingredient(s)	Affected organ(s)
cocoamidopropyl betaine hydrogenated	No data available
alkyl polyglucoside	No data available
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	Not applicable

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
cocoamidopropyl betaine hydrogenated	No data available
alkyl polyglucoside	No data available
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	Kidneys

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)
cocoamidopropyl betaine hydrogenated	LC 50	1.11	Fish	OECD 203, semi-static	96
alkyl polyglucoside	LC 50	1 - 10	Fish	ISO 7346	-
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	LC 50	0.45	Lepomis macrochirus	OPP 72-1, static (EPA)	96

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
cocoamidopropyl betaine hydrogenated	EC 50	1.9	Daphnia	OECD 202, static	48
alkyl polyglucoside	EC 50	7	Daphnia magna Straus	Method not given	48
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	EC 50	0.073	Daphnia magna Straus	EPA-OPPTS 850.1010 OECD 202 (EU C.2)	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
cocoamidopropyl betaine hydrogenated	Er C 50	2.4	Not specified	Method not given	72
alkyl polyglucoside	EC 50	10 - 100	Not specified	88/302/EEC, Part C, static	-
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	Er C 50	0.054	Pseudokirchner iella subcapitata	EPA OPPTS 850.5400	96

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
cocoamidopropyl betaine hydrogenated	ErC 50	0.74	Skeletonema costatum Phaeodactylum tricornutum	ISO 10253	72
alkyl polyglucoside		No data available			-
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine		No data available			-

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
cocoamidopropyl betaine hydrogenated	EC 50	3000	Bacteria	ISO 13641 (2003), anaerobic	16 hour(s)
alkyl polyglucoside	EC o	> 100	Bacteria	OECD 209	
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	EC 50	18	Activated sludge	OECD 209	3 hour(s)

Aquatic long-term toxicity Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
cocoamidopropyl betaine hydrogenated	NOEC	0.135	Oncorhynchus mykiss	OECD 210	100 day(s)	
alkyl polyglucoside	NOEC	1 - 10	Not specified	OECD 204	14 day(s)	

N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	No data		
	available		

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Effects observed
		(mg/l)			time	
cocoamidopropyl betaine hydrogenated	NOEC	0.3	Daphnia	OECD 211	21 day(s)	
			magna			
alkyl polyglucoside	NOEC	1 - 10	Daphnia sp.	OECD 202		
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	NOEC	0.024	Daphnia	OECD 211	21 day(s)	
			magna			

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

Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Effects observed
		(mg/kg dw sediment)			time (days)	
cocoamidopropyl betaine hydrogenated		No data			-	
		available				
alkyl polyglucoside		No data			-	
		available				
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine		No data			-	
		available				

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

Ingredient(s)	Endpoint	Value (mg/kg dw	Species	Method	Exposure time (days)	Effects observed
		soil)				
cocoamidopropyl betaine hydrogenated		No data			-	
		available				
alkyl polyglucoside		No data			-	
·		available				
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	LD 50	> 1000	Eisenia fetida	OECD 207	14	

Terrestrial toxicity - plants, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
cocoamidopropyl betaine hydrogenated		No data available			-	
alkyl polyglucoside		No data available			-	
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine		No data available			-	

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
cocoamidopropyl betaine hydrogenated		No data available			-	
alkyl polyglucoside		No data available			-	
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine		No data available			-	

Terrestrial toxicity - beneficial insects, if available:

Terrestrial toxicity berieficial insects, if available.						
Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Effects observed
• ,,	·	(mg/kg dw	•		time (days)	
					(,,	
		soil)				
cocoamidopropyl betaine hydrogenated		No data			-	
		available				
alkyl polyglucoside		No data			-	
		available				
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine		No data			-	
		available				

Terrestrial toxicity - soil bacteria, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
cocoamidopropyl betaine hydrogenated		No data available			-	
alkyl polyglucoside		No data available			-	
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	NOEC	1000		·	28	

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
cocoamidopropyl betaine hydrogenated			95 % in 28 day(s)	Method not given	Readily biodegradable
alkyl polyglucoside			88% in 28 day(s)	OECD 301E	Readily biodegradable
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine		Oxygen depletion	79 % in 28 day(s)	OECD 301D	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:

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow

Ingredient(s)	Value	Method	Evaluation	Remark
cocoamidopropyl betaine hydrogenated	4.2	Method not given	Low potential for bioaccumulation	
alkyl polyglucoside	=< 0.07	Method not given	No bioaccumulation expected	
N-(3-aminopropyl)-N-dodecylpropane-1, 3-diamine	-0.66		No bioaccumulation expected	

Bioconcentration factor (BCF)

Bioconcentration factor (BCF)				
Ingredient(s)	Value	Species	Method	Evaluation	Remark
cocoamidopropyl	3 - 71		Method not given	Low potential for bioaccumulation	
betaine hydrogenated					
alkyl polyglucoside	No data available				
N-(3-aminopropyl)-N-do	No data available				
decylpropane-1,3-diami					l l
ne					

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
cocoamidopropyl betaine hydrogenated	No data available				Potential for mobility in soil, soluble in water
alkyl polyglucoside	1.7		Method not given		
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	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



Land transport (ADR/RID), Sea transport (IMDG), Air transport (ICAO-TI / IATA-DGR)

14.1 UN number: 1760

14.2 UN proper shipping name:

Corrosive liquid, n.o.s. (trisodium citrate)

14.3 Transport hazard class(es):

Class: 8
Label(s): 8

14.4 Packing group: III

14.5 Environmental hazards:
Environmentally hazardous: No

Marine pollutant: No

14.6 Special precautions for user: None known.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code: The product is not transported in bulk tankers.

Other relevant information:

ADR

Classification code: C9
Tunnel restriction code: E
Hazard identification number: 80

IMO/IMDG

EmS: F-A, S-B

The product has been classified, labelled and packaged in accordance with the requirements of ADR and the provisions of the IMDG Code Transport regulations include special provisions for certain classes of dangerous goods packed in limited quantities.

SECTION 15: Regulatory information

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

EU regulations:

- Regulation (EC) No. 1907/2006 REACH
- · Regulation (EC) No 1272/2008 CLP
- Regulation (EC) No. 648/2004 Detergents regulation
- Regulation (EU) No 528/2012 on biocidal products

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, non-ionic surfactants disinfectants, perfumes, Citral, Limonene

< 5 %

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out on the mixture

SECTION 16: Other information

The information in this document is based on our best present knowledge. However, it does not constitute a guarantee for any specific product features and does not establish a legally binding contract

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Reason for revision:

This data sheet contains changes from the previous version in section(s):, 1, 3, 4, 7, 8, 9, 11, 12, 15, 16

Classification procedure

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

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

- H301 Toxic if swallowed.
- H314 Causes severe skin burns and eye damage.
- · H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- H412 Harmful to aquatic life with long lasting effects.

Abbreviations and acronyms:

- AISE The international Association for Soaps, Detergents and Maintenance Products
- DNEL Derived No Effect Limit
- EUH CLP Specific hazard statement
- · PBT Persistent, Bioaccumulative and Toxic
- PNEC Predicted No Effect Concentration

- REACH number REACH registration number, without supplier specific part
 vPvB very Persistent and very Bioaccumulative
 ATE Acute Toxicity Estimate
 LD50 Lethal Dose, 50% / Median Lethal dose
 LC50 Lethal Concentration, 50% / Median Lethal Concentration
 EC50 effective concentration, 50%
 NOEL No observed effect level

- NOAEL No observed adverse effect level
 OECD Organization for Economic Cooperation and Development

End of Safety Data Sheet