



Suma Star Des D1.55

Revision: 2022-05-08

Version: 02.1

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

1.1 Product identifier

Trade name: Suma Star Des D1.55

UFI: 9RQ2-A0TU-W00C-KAMF

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

Product use: Hard surface cleaner.
Surface disinfectant.
For professional use only.

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

SWED - Sector-specific worker exposure description :

AISE_SWED_PW_8a_1
AISE_SWED_PW_8b_1
AISE_SWED_PW_10_1
AISE_SWED_PW_11_1
AISE_SWED_PW_19_1

1.3 Details of the supplier of the safety data sheet

Diversey Europe Operations BV, Maarssenbroeksedijk 2, 3542DN Utrecht, The Netherlands

Contact details

Diversey Hygiene Sales Limited
Jamestown Road, Finglas, Dublin 11, Ireland
Tel: 01 8081808 (9am - 5pm Mon-Fri)
Email: dublin.orders@diversev.com

1.4 Emergency telephone number

Seek medical advice (show the label or safety data sheet where possible).
National Poisons Information Centre
Tel: 01 809 2166. (8.00 a.m. to 10.00 p.m. 7 days a week)
Tel: 01 809 2566 (health care professionals).

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

Hazard statements:

H290 - May be corrosive to metals.
H315 - Causes skin irritation.
H318 - Causes serious eye damage.
H412 - Harmful to aquatic life with long lasting effects.

Suma Star Des D1.55

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
trisodium citrate	200-675-3	68-04-2	[1]	Not classified as hazardous		10-20
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	931-292-6	308062-28-4	01-2119490061-47	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	931-333-8 931-513-6 931-296-8	-	01-2119489410-39 01-2119513359-38 01-2119488533-30	Eye Dam. 1 (H318) Aquatic Chronic 3 (H412)		3-10
alkyl polyglucoside	600-975-8	110615-47-9	01-2119489418-23	Skin Irrit. 2 (H315) Eye Dam. 1 (H318)		1-3
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	219-145-8	2372-82-9	[6]	Acute Tox. 3 (H301) Skin Corr. 1B (H314) STOT RE 2 (H373) Eye Dam. 1 (H318) Aquatic Acute 1 M=10 (H400) Aquatic Chronic 1 (H410)		1-3

Specific concentration limits

cocoamidopropyl betaine hydrogenated:

- Eye Dam. 1 (H318) >= 10% > Eye Irrit. 2 (H319) >= 4%

alkyl polyglucoside:

- Skin Irrit. 2 (H315) >= 30%

- Eye Dam. 1 (H318) >= 12% > Eye Irrit. 2 (H319) >= 1%

Workplace exposure limit(s), if available, are listed in subsection 8.1.

ATE, if available, are listed in section 11.

[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.

[6] Exempted: biocidal active. See Article 15(2) 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.

Skin contact:

Take off immediately all contaminated clothing and wash it before reuse.

Eye contact:

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.

Ingestion:

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.

Ingestion:

No known effects or symptoms in normal use.

4.3 Indication of any immediate medical attention and special treatment needed

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

SECTION 5: Firefighting measures**5.1 Extinguishing media**

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

5.2 Special hazards arising from the substance or mixture

No special hazards known.

5.3 Advice for firefighters

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

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Wear eye/face protection. Repeated or prolonged contact: Wear suitable gloves.

6.2 Environmental precautions

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

Dyke to collect large liquid spills. Absorb with liquid-binding material (sand, diatomite, universal binders, sawdust). Do not place spilled materials back into the original container. Collect in closed and suitable containers for disposal.

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 Diversey. Wash face, hands and any exposed skin thoroughly after handling. Take off contaminated clothing. Wash contaminated clothing before reuse. Avoid contact with skin and eyes. Do not breathe spray. 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 packaging. 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:

Recommended monitoring procedures, if available:

Additional exposure limits under the conditions of use, if available:

DNEL/DMEL and PNEC values**Human exposure**

DNEL/DMEL oral exposure - Consumer (mg/kg bw)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
trisodium citrate	-	-	-	-
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	-	-	-	0.44

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

DNEL/DMEL 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)
trisodium citrate	No data available	-	No data available	-
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	No data available	-	- %	11
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/DMEL 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)
trisodium citrate	No data available	-	No data available	-
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	No data available	-	- %	5.5
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/DMEL inhalatory exposure - Worker (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
trisodium citrate	-	-	-	-
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	-	-	-	6.2
cocoamidopropyl betaine hydrogenated	-	-	-	44
alkyl polyglucoside	-	-	-	420
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	-	-	-	2.35

DNEL/DMEL inhalatory exposure - Consumer (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
trisodium citrate	-	-	-	-
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	-	-	-	1.53
cocoamidopropyl betaine hydrogenated	-	-	-	13.04
alkyl polyglucoside	-	-	-	124
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	-	-	-	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)
trisodium citrate	0.44	0.044	-	1000
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	0.0335	0.00335	0.0335	24
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/m ³)
trisodium citrate	34.6	3.46	33.1	-
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	5.24	0.524	1.02	-
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:

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.

Suma Star Des D1.55

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

REACH use scenarios considered for the undiluted product:

	SWED - Sector-specific worker exposure description	LCS	PROC	Duration (min)	ERC
Manual transfer and dilution	AISE_SWED_PW_8a_1	PW	PROC 8a	60	ERC8a
Manual transfer and dilution	AISE_SWED_PW_8b_1	PW	PROC 8b	60	ERC8b

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.

Repeated or prolonged contact: 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 (% w/w): 2

Appropriate engineering controls: Provide a good standard of general ventilation.

Appropriate organisational controls: No special requirements under normal use conditions.

REACH use scenarios considered for the diluted product:

	SWED	LCS	PROC	Duration (min)	ERC
Manual application by brushing, wiping or mopping	AISE_SWED_PW_10_1	PW	PROC 10	480	ERC8a
Spray application	AISE_SWED_PW_11_1	PW	PROC 11	60	ERC8a
Manual application	AISE_SWED_PW_19_1	PW	PROC 19	480	ERC8a

Personal protective equipment**Eye / face protection:**

No special requirements under normal use conditions.

Hand protection:

No special requirements under normal use conditions.

Body protection:

No special requirements under normal use conditions.

Respiratory protection:

Trigger spray bottle application: No special requirements under normal use conditions. Apply technical measures to comply with the occupational exposure limits, if available

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: Product specific	
Odour threshold: Not applicable	
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 (°C)	Method	Atmospheric pressure (hPa)
trisodium citrate	No data available		
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
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	No data available		

Method / remark**Flammability (solid, gas):** Not applicable to liquids**Flammability (liquid):** Not flammable.**Flash point (°C):** Not applicable.**Sustained combustion:** Not applicable.*(UN Manual of Tests and Criteria, section 32, L.2)***Lower and upper explosion limit/flammability limit (%):** Not determined

Substance data, flammability or explosive limits, if available:

Method / remark**Autoignition temperature:** Not determined**Decomposition temperature:** Not applicable.**pH:** ≈ 10 (neat)**Dilution pH:** ≈ 10 (2 %)**Kinematic viscosity:** Not determined**Solubility in / Miscibility with Water:** Fully miscible

ISO 4316

ISO 4316

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
trisodium citrate	No data available		
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	409.5 Soluble	Method not given	20
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**Vapour pressure:** Not determined

See substance data

Substance data, vapour pressure

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
trisodium citrate	No data available		
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	< 10	Method not given	25
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**Relative density:** ≈ 1.09 (20 °C)**Relative vapour density:** No data available.**Particle characteristics:** No data available.

OECD 109 (EU A.3)

Not relevant to classification of this product

Not applicable to liquids.

9.2 Other information**9.2.1 Information with regard to physical hazard classes****Explosive properties:** Not explosive.**Oxidising properties:** Not oxidising.**Corrosion to metals:** Corrosive

Weight of evidence

9.2.2 Other safety characteristics

No other relevant information 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

Suma Star Des D1.55

May be corrosive to metals.

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)	ATE (mg/kg)
trisodium citrate	LD ₅₀	5400		OECD 401 (EU B.1)		Not established
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	LD ₅₀	> 1064 1064	Rat	OECD 401 (EU B.1)		9500
cocoamidopropyl betaine hydrogenated	LD ₅₀	2335	Rat	Method not given		Not established
alkyl polyglucoside	LD ₅₀	> 5000	Rat	OECD 401 (EU B.1)		Not established
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	LD ₅₀	261	Rat	Method not given		12000

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)	ATE (mg/kg)
trisodium citrate		No data available				Not established
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	LD ₅₀	> -	Rat	OECD 402 (EU B.3)		Not established
cocoamidopropyl betaine hydrogenated	LD ₅₀	> 5000	Rat	OECD 402 (EU B.3)		Not established
alkyl polyglucoside	LD ₅₀	> 5000	Rabbit	OECD 402 (EU B.3)		Not established
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	LD ₅₀	> 2000	Rat	OECD 402 (EU B.3)		Not established

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
trisodium citrate		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			
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine		No data available			

Acute inhalative toxicity, continued

Ingredient(s)	ATE - inhalation, dust (mg/l)	ATE - inhalation, mist (mg/l)	ATE - inhalation, vapour (mg/l)	ATE - inhalation, gas (mg/l)
trisodium citrate	Not established	Not established	Not established	Not established
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	Not established	Not established	Not established	Not established
cocoamidopropyl betaine hydrogenated	Not established	Not established	Not established	Not established
alkyl polyglucoside	Not established	Not established	Not established	Not established
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	Not established	Not established	Not established	Not established

Irritation and corrosivity

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
trisodium citrate	No data available			
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	Irritant	Rabbit	OECD 404 (EU B.4)	
cocoamidopropyl betaine hydrogenated	Mild irritant	Rabbit	OECD 404 (EU B.4)	
alkyl polyglucoside	Irritant	Rabbit	OECD 404 (EU B.4)	4 hour(s)
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
trisodium citrate	No data available			
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)	
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	No data available			

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
trisodium citrate	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			
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	No data available			

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
trisodium citrate	No data available			
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) / 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
trisodium citrate	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			
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)	Method (in-vitro)	Result (in-vivo)	Method (in-vivo)
trisodium citrate	No data available		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	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13) OECD 476	No evidence for mutagenicity, negative test results	OECD 474 (EU B.12)
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)
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13) OECD 473 OECD 476	No data available	

Carcinogenicity

Ingredient(s)	Effect
trisodium citrate	No data available
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
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
trisodium citrate			No data available				
amines, C12-14 (even numbered)-alkyldimeth	NOAEL	Teratogenic effects	25	Rat	Non guideline test		

Suma Star Des D1.55

yl, N-oxides							
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-dodecylpropane-1,3-diamine			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
trisodium citrate		No data available				
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	NOAEL	-		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)		
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
trisodium citrate		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				
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine		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
trisodium citrate		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				
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine		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
trisodium citrate			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					
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
trisodium citrate	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

Suma Star Des D1.55

N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	Not applicable
--	----------------

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
trisodium citrate	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
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	Kidneys

Aspiration hazard

Substances with an aspiration hazard (H304), if any, are listed in section 3.

Potential adverse health effects and symptoms

Effects and symptoms related to the product, if any, are listed in subsection 4.2.

11.2 Information on other hazards**11.2.1 Endocrine disrupting properties**

Endocrine disrupting properties - Human data, if available:

11.2.2 Other information

No other relevant information available.

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)
trisodium citrate	LC ₅₀	10		Weight of evidence	
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	LC ₅₀	2.67-3.46	<i>Pimephales promelas</i>	Similar to OECD 203	96
cocoamidopropyl betaine hydrogenated	LC ₅₀	1.11	<i>Fish</i>	OECD 203, semi-static	96
alkyl polyglucoside	LC ₅₀	1 - 10	<i>Fish</i>	ISO 7346	
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	LC ₅₀	0.1	<i>Fish</i>	OECD 203 (EU C.1)	96

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
trisodium citrate	EC ₅₀	> 50		Weight of evidence	
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	EC ₅₀	3.1	<i>Daphnia magna Straus</i>	OECD 202, static	48
cocoamidopropyl betaine hydrogenated	EC ₅₀	1.9	<i>Daphnia</i>	OECD 202, static	48
alkyl polyglucoside	EC ₅₀	7	<i>Daphnia magna Straus</i>	Method not given	48
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	EC ₅₀	0.073	<i>Daphnia magna Straus</i>	OECD 202 (EU C.2)	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
trisodium citrate	EC ₅₀	425		Weight of evidence	
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	E _r C ₅₀	0.143	<i>Pseudokirchneriella subcapitata</i>	Method not given	72
cocoamidopropyl betaine hydrogenated	E _r C ₅₀	2.4	<i>Not specified</i>	Method not given	72
alkyl polyglucoside	EC ₅₀	10 - 100	<i>Not specified</i>	88/302/EEC, Part C, static	
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	E _r C ₅₀	0.054	<i>Pseudokirchneriella subcapitata</i>	OECD 201 (EU C.3)	96

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
---------------	----------	--------------	---------	--------	----------------------

Suma Star Des D1.55

trisodium citrate		No data available			
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides		No data available			
cocoamidopropyl betaine hydrogenated	ErC ₅₀	0.74	<i>Skeletonema costatum</i> <i>Phaeodactylum tricornutum</i>	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
trisodium citrate		No data available			
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	EC ₁₀	> -	<i>Bacteria</i>	Non guideline test	- hour(s)
cocoamidopropyl betaine hydrogenated	EC ₅₀	3000	<i>Bacteria</i>	ISO 13641 (2003), anaerobic	16 hour(s)
alkyl polyglucoside	EC ₀	> 100	<i>Bacteria</i>	OECD 209	
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	EC ₅₀	18	<i>Activated sludge</i>	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
trisodium citrate		No data available				
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	NOEC	-	<i>Pimephales promelas</i>	Method not given	- day(s)	
cocoamidopropyl betaine hydrogenated	NOEC	0.135	<i>Oncorhynchus mykiss</i>	OECD 210	37 day(s)	
alkyl polyglucoside	NOEC	1 - 10	<i>Not specified</i>	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 (mg/l)	Species	Method	Exposure time	Effects observed
trisodium citrate		No data available				
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	NOEC	-	<i>Daphnia magna</i>	OECD 211, flow-through	- day(s)	
cocoamidopropyl betaine hydrogenated	NOEC	0.3	<i>Daphnia magna</i>	OECD 211	21 day(s)	
alkyl polyglucoside	NOEC	1 - 10	<i>Daphnia sp.</i>	OECD 202		
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	NOEC	0.024	<i>Daphnia magna</i>	OECD 211	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
trisodium citrate		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				
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine		No data available				

Terrestrial toxicity

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

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
cocoamidopropyl betaine hydrogenated	NOEC	≥ 846	<i>Eisenia fetida</i>		14	
alkyl polyglucoside		No data available				
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	LD ₅₀	> 1000	<i>Eisenia fetida</i>	OECD 207	14	

Suma Star Des D1.55

Terrestrial toxicity - plants, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
cocoamidopropyl betaine hydrogenated	NOEC	84.6	<i>Brassica alba</i> <i>Lepidium sativum</i> <i>Triticum aestivum</i>	OECD 208	17	
alkyl polyglucoside		No data available				

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
alkyl polyglucoside		No data available				

Terrestrial toxicity - beneficial insects, if available:

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

Terrestrial toxicity - soil bacteria, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
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:

Ingredient(s)	Half-life time	Method	Evaluation	Remark
alkyl polyglucoside	No data available			

Abiotic degradation - hydrolysis, if available:

Ingredient(s)	Half-life time in fresh water	Method	Evaluation	Remark
alkyl polyglucoside	No data available			

Abiotic degradation - other processes, if available:

Ingredient(s)	Type	Half-life time	Method	Evaluation	Remark
alkyl polyglucoside		No data available			

Biodegradation

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT ₅₀	Method	Evaluation
trisodium citrate		DOC reduction	97 % in 28 day(s)	OECD 301E	Readily biodegradable
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	Activated sludge, aerobe	CO ₂ production	90 % in 28 day(s)	OECD 301B	Readily biodegradable
cocoamidopropyl betaine hydrogenated	Activated sludge, aerobe	CO ₂ production	91.6 % in 28 day(s)	OECD 301B	Readily biodegradable
alkyl polyglucoside	Activated sludge, aerobe	BOD removal	88% in 28 day(s)	OECD 301D	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
alkyl polyglucoside					No data available

Degradation in relevant environmental compartments, if available:

Ingredient(s)	Medium & Type	Analytical method	DT ₅₀	Method	Evaluation
---------------	---------------	-------------------	------------------	--------	------------

Suma Star Des D1.55

alkyl polyglucoside				No data available
---------------------	--	--	--	-------------------

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
trisodium citrate	< 0		No bioaccumulation expected	
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	< -	Method not given	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	
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	-0.66		No bioaccumulation expected	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
trisodium citrate	3.2			No bioaccumulation expected	
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	No data available				
cocoamidopropyl betaine hydrogenated	71		QSAR	Low potential for bioaccumulation	
alkyl polyglucoside	No data available				
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	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
trisodium citrate	No data available				
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	No data available				Low mobility in soil
cocoamidopropyl betaine hydrogenated	2.0-5.1		QSAR		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 Endocrine disrupting properties

Endocrine disrupting properties - Environmental effects, if available:

12.7 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:****Empty packaging****Recommendation:****Suitable cleaning agents:**

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.

Dispose of observing national or local regulations.

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):**Transport hazard class (and subsidiary risks):** 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
- substances identified as having endocrine disrupting properties in accordance with the criteria set out in Delegated Regulation (EU) 2017/2100 or Regulation (EU) 2018/605
- Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)
- International Maritime Dangerous Goods (IMDG) Code

Authorisations or restrictions (Regulation (EC) No 1907/2006, Title VII respectively Title VIII): Not applicable.**Ingredients according to EC Detergents Regulation 648/2004**

non-ionic surfactants	5 - 15 %
amphoteric surfactants	< 5 %
disinfectants, perfumes, Citral, Limonene	

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.

Seveso - Classification: Not classified**15.2 Chemical safety assessment**

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

SECTION 16: Other information

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

SDS code: MS1002781**Version:** 02.1**Revision:** 2022-05-08**Reason for revision:**

This data sheet contains changes from the previous version in section(s):, 1, 3, 4, 7, 8, 11, 12, 15, 16, Overall design adjusted in accordance with Amendment 2020/878, 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

Suma Star Des D1.55

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.
- H302 - Harmful 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.
- H411 - 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
- ATE - Acute Toxicity Estimate
- DNEL - Derived No Effect Limit
- EC50 - effective concentration, 50%
- ERC - Environmental release categories
- EUH - CLP Specific hazard statement
- LC50 - Lethal Concentration, 50% / Median Lethal Concentration
- LCS - Life cycle stage
- LD50 - Lethal Dose, 50% / Median Lethal dose
- NOAEL - No observed adverse effect level
- NOEL - No observed effect level
- OECD - Organisation for Economic Cooperation and Development
- PBT - Persistent, Bioaccumulative and Toxic
- PNEC - Predicted No Effect Concentration
- PROC - Process categories
- REACH number - REACH registration number, without supplier specific part
- vPvB - very Persistent and very Bioaccumulative

End of Safety Data Sheet