

Safety Data Sheet

According to Regulation (EC) No 1907/2006

Divosan SaniPerfect VS61

Revision: 2024-12-24 **Version:** 02.1

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

1.1 Product identifier

Trade name: Divosan SaniPerfect VS61

UFI: G25G-V0JG-H00D-AEW0

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

Product use: Surface disinfectant.

Open plant cleaning chemical. for general surface disinfection for food contact surface disinfection For professional and industrial use only.

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

SWED - Sector-specific worker exposure description :

AISE_SWED_PW_8b_1 AISE_SWED_IS_8b_1 AISE_SWED_IS_41 AISE_SWED_PW_41 AISE_SWED_PW_19_1 AISE_SWED_IS_4_1 AISE_SWED_IS_7_4 AISE_SWED_IS_7_5 AISE_SWED_IS_7_5 AISE_SWED_IS_13_3

1.3 Details of the supplier of the safety data sheet

Diversey Europe Operations BV, De Corridor 4, 3621ZB Breukelen [Maarssenbroeksedijk 2, 3542DN Utrecht], The Netherlands

Contact details

Diversey Ltd

Weston Favell Centre, Northampton NN3 8PD, United Kingdom

Tel: 01604 405311, Fax: 01604 406809

Regulatory Email: customerservice.uk@solenis.com

1.4 Emergency telephone number

Seek medical advice (show the label or safety data sheet where possible)

For medical or environmental emergency only:

call 0800 052 0185

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Skin irritation, Category 2 (H315) Serious eye damage, Category 1 (H318) Acute aquatic toxicity, Category 1 (H400) Chronic aquatic toxicity, Category 2 (H411) Corrosive to metals, Category 1 (H290)

2.2 Label elements



Signal word: Danger.

Contains alkyl alcohol ethoxylate (Trideceth-8), N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine (Laurylamine Dipropylenediamine), tetrasodium ethylene diamine tetraacetate (Tetrasodium EDTA)

Hazard statements:

H315 - Causes skin irritation.

H318 - Causes serious eye damage.

H410 - Very toxic 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
trisodium citrate	200-675-3	[1]	[1]	Not classified as hazardous		3-10
alkyl alcohol ethoxylate	[4]	69011-36-5		Acute toxicity - Oral, Category 4 (H302) Serious eye damage, Category 1 (H318)		3-10
N-(3-aminopropyl)-N-dodecylpropane-1, 3-diamine	219-145-8	2372-82-9		Acute toxicity - Oral, Category 3 (H301) Skin corrosion, Category 1A (H314) Specific target organ toxicity - Repeated exposure, Category 2 (H373) Acute aquatic toxicity, Category 1 M=10 (H400) Chronic aquatic toxicity, Category 1 M=1 (H410)		3-10
tetrasodium ethylene diamine tetraacetate	200-573-9	64-02-8	2-27	Acute toxicity - Oral, Category 4 (H302) Acute toxicity - Inhalation, Category 4 (H332) Specific target organ toxicity - Repeated exposure, Category 2 (H373) Serious eye damage, Category 1 (H318)		1-3

Specific concentration limits

alkyl alcohol ethoxylate

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. [4] Exempted: polymer. See Article 2(9) of Regulation (EC) No 1907/2006.

[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.

Hold eyelids apart and flush eyes with plenty of lukewarm water for at least 15 minutes. Remove Eye contact:

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.

Consider personal protective equipment as indicated in subsection 8.2. Self-protection of first aider:

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. Indestion:

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.

[•] Serious eye damage, Category 1 (H318) >= 10% > Eye irritation, Category 2 (H319) >= 1%

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 suitable gloves. Wear eye/face protection.

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). 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.

Advice 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. 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.

Comah - Lower Tier requirements (tonnes): 100 Comah - Upper Tier requirements (tonnes): 200

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	-	-	-	-
alkyl alcohol ethoxylate	-	-	-	-
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	-	-	-	0.04
tetrasodium ethylene diamine tetraacetate	-	-	-	25

DNEL/DMEL	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)
trisodium citrate	No data available	-	No data available	-
alkyl alcohol ethoxylate	-	-	-	-
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	-	-	-	0.91
tetrasodium ethylene diamine tetraacetate	-	-	-	-

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	-
alkyl alcohol ethoxylate	-	-	-	-
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	-	-	-	0.54
tetrasodium ethylene diamine tetraacetate	-	-	=	-

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	-	-	-	-
alkyl alcohol ethoxylate	-	-	-	-
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	-	-	-	2.35
tetrasodium ethylene diamine tetraacetate	3	3	1.5	1.5

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	-	-	-	-
alkyl alcohol ethoxylate	-	-	-	-
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	-	-	-	0.7
tetrasodium ethylene diamine tetraacetate	1.2	1.2	0.6	-

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
alkyl alcohol ethoxylate	-	-	-	-
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	0.001	0.0001	0.00015	1.33
tetrasodium ethylene diamine tetraacetate	2.2	0.22	1.2	43

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m³)
trisodium citrate	34.6	3.46	33.1	-
alkyl alcohol ethoxylate	-	-	-	-
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	8.5	0.85	45.34	-
tetrasodium ethylene diamine tetraacetate	-	-	0.72	-

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 <u>undiluted</u> product:

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

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

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

REACH use scenarios considered for the ununitied product.								
	SWED - Sector-specific	LCS	PROC	Duration	ERC			
	worker exposure			(min)				
	description							
Automatic transfer and dilution	AISE_SWED_IS_8b_1	IS	PROC 8b	60	ERC4			
Automatic transfer and dilution	AISE SWED PW 8h 1	PW/	PROC 8h	60	FRC8h			

Personal protective equipment Eye / face protection: Hand protection:

Safety glasses or goggles (EN 16321). 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 <u>diluted</u> product:

Recommended maximum concentration (% w/w): 7

Provide a good standard of general ventilation. Ensure that foam equipment does not generate Appropriate engineering controls:

respirable particles.

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

REACH use scenarios considered for the diluted product:

	SWED	LCS	PROC	Duration	ERC
				(min)	
Manual application by dipping, soaking, pouring	AISE_SWED_IS_13_3	IS	PROC 13	240	ERC4
Automatic application in a dedicated system	AISE_SWED_IS_4_1	IS	PROC 4	480	ERC8a
Foam spraying	AISE_SWED_IS_7_4	IS	PROC 7	480	ERC4
Spray application	AISE_SWED_IS_7_5				
Manual application by dipping, soaking, pouring	AISE_SWED_PW_13_2	PW	PROC 13	60	ERC8a
Manual application	AISE_SWED_PW_19_1	PW	PROC 19	480	ERC8a
Automatic application in a dedicated system	AISE_SWED_PW_4_1	PW	PROC 4	480	ERC8a

Personal protective equipment

Eye / face protection: Safety glasses or goggles (EN 16321) are always recommended for foam applications.

Hand protection: Chemical-resistant protective gloves (EN 374) are always recommended for foam applications. 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

Suggested gloves for prolonged contact: Material: butyl rubber Penetration time: ≥ 480 min Material thickness: ≥ 0.7 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.

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 , Pale , 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		
alkyl alcohol ethoxylate	> 200	Method not given	
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	No data available		
tetrasodium ethylene diamine tetraacetate	No data available	Non-experimental data	

Method / remark

Flammability (solid, gas): Not applicable to liquids

Flammability (liquid): Not flammable.

Flash point (°C): > 93 °C closed cup

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) ISO 4316 **Dilution pH:** ≈ 10 (7 %) ISO 4316

Kinematic viscosity: Not determined

Solubility in / Miscibility with water: Fully miscible

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
trisodium citrate	No data available		
alkyl alcohol ethoxylate	Soluble	Method not given	20
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	Soluble		
tetrasodium ethylene diamine tetraacetate	500	Method not given	20

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

Method / remark

See substance data Vapour pressure: Not determined

Substance data, vapour pressure

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
trisodium citrate	No data available		
alkyl alcohol ethoxylate	Negligible	Method not given	20-25
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	No data available		
tetrasodium ethylene diamine tetraacetate	0.0000000002	Read across	25

Method / remark

OECD 109 (EU A.3)

Not relevant to classification of this product

Not applicable to liquids.

Relative density: ≈ 1.08 (20 °C) Relative vapour density: No data available.

Particle characteristics: No data available.

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

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 hazard classes as defined in Regulation (EC) No 1272/2008

Mixture data: .

Relevant calculated ATE(s): ATE - Oral (mg/kg): >2000 ATE - Inhalatory, mists (mg/l): >5

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 Oral (mg/kg)
trisodium citrate	LD 50	5400		OECD 401 (EU B.1)		Not established
alkyl alcohol ethoxylate	LD 50	> 300-2000	Rat	OECD 423 (EU B.1 tris)		18000
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	LD 50	261	Rat	OECD 401 (EU B.1)		261
tetrasodium ethylene diamine tetraacetate	LD 50	1780	Rat	OECD 401 (EU B.1)		1780

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)	ATE Dermal (mg/kg)
trisodium citrate		No data available				Not established
alkyl alcohol ethoxylate	LD 50	> 2000	Rabbit	Method not given		Not established
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	LD 50	> 2000	Rat	OECD 402 (EU B.3)		Not established
tetrasodium ethylene diamine tetraacetate	LD 50	> 5000	Rabbit	Method not given		Not established

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
trisodium citrate		No data available			
alkyl alcohol ethoxylate		No data available			
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine		No data available			
tetrasodium ethylene diamine tetraacetate	LC 50	≥ 1-5 (dust)	Rat	OECD 403 (EU B.2)	6

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
alkyl alcohol ethoxylate	Not established	Not established	Not established	Not established
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	Not established	Not established	Not established	Not established
tetrasodium ethylene diamine tetraacetate	Not established	25	Not established	Not established

Irritation and corrosivity Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
trisodium citrate	No data available			
alkyl alcohol ethoxylate	Not irritant	Rabbit	OECD 404 (EU B.4)	
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	Corrosive	Rabbit	OECD 431 (EU B.40 bis)	
tetrasodium ethylene diamine tetraacetate	Not irritant	Rabbit	OECD 404 (EU B.4)	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
trisodium citrate	No data available			
alkyl alcohol ethoxylate	Severe damage	Rabbit	Method not given	
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	Severe damage			
tetrasodium ethylene diamine tetraacetate	Severe damage		Method not given	

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
trisodium citrate	No data available			

alkyl alcohol ethoxylate	No data available		
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	No data available		
tetrasodium ethylene diamine tetraacetate	No data available		

Sensitisation Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
trisodium citrate	No data available			
alkyl alcohol ethoxylate	Not sensitising	Guinea pig	Method not given	
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	Not sensitising	Guinea pig	OECD 406 (EU B.6) / Buehler test	
tetrasodium ethylene diamine tetraacetate	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
trisodium citrate	No data available			
alkyl alcohol ethoxylate	No data available			
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	No data available			
tetrasodium ethylene diamine tetraacetate	No data available			

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction) $\underline{\text{Mutagenicity}}$

Ingredient(s)	Result (in-vitro)	Method (in-vitro)	Result (in-vivo)	Method (in-vivo)
trisodium citrate	No data available		No data available	
	No evidence of genotoxicity, negative test results		No evidence of genotoxicity, negative test results	Method not given
N-(3-aminopropyl)-N-dodecylpropane-1,3-diami ne	, , , ,	OECD 471 (EU B.12/13) OECD 473 OECD 476		
	No evidence for mutagenicity, negative test results		No evidence of genotoxicity, negative test results	Method not given

Carcinogenicity

Ingredient(s)	Effect		
trisodium citrate	No data available		
alkyl alcohol ethoxylate	No evidence for carcinogenicity, weight-of-evidence		
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	No data available		
tetrasodium ethylene diamine tetraacetate	No evidence for carcinogenicity, weight-of-evidence		

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				
alkyl alcohol ethoxylate	NOAEL	Teratogenic effects	> 50	Rat	Not known		No known significant effects or critical hazards
N-(3-aminopropyl)-N-do decylpropane-1,3-diami ne			No data available				No evidence for reproductive toxicity
tetrasodium ethylene diamine tetraacetate			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				
alkyl alcohol ethoxylate		No data available				
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine		No data available				
tetrasodium ethylene diamine tetraacetate		No data available				

Sub-chronic dermal toxicity

eas cincine dermantement						
Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
trisodium citrate		No data			` .	

	available		
alkyl alcohol ethoxylate	No data		
	available		
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	No data		
	available		
tetrasodium ethylene diamine tetraacetate	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				
alkyl alcohol ethoxylate		No data available				
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine		No data available				
tetrasodium ethylene diamine tetraacetate		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					
alkyl alcohol ethoxylate	Oral	NOAEL	50	Rat	Method not given	24 month(s)	Effects on organ weights	
N-(3-aminopropyl)-N-do decylpropane-1,3-diami ne			No data available					
tetrasodium ethylene diamine tetraacetate			No data available					

STOT-single exposure

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Ingredient(s)		Affected organ(s)
trisodium citrate		No data available
	alkyl alcohol ethoxylate	Not applicable
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine		Not applicable
	tetrasodium ethylene diamine tetraacetate	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)		
trisodium citrate	No data available		
alkyl alcohol ethoxylate	Not applicable		
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	Kidneys		
tetrasodium ethylene diamine tetraacetate	Respiratory tract		

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	Species	Method	Exposure
		(ma/l)	•		time (h)

trisodium citrate	LC 50	10		Weight of evidence	
alkyl alcohol ethoxylate	LC 50	> 1 - 10	Cyprinus carpio	OECD 203 (EU C.1)	96
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	LC 50	0.1	Fish	OECD 203 (EU C.1)	96
tetrasodium ethylene diamine tetraacetate	LC 50	> 100	Lepomis	OPP 72-1, static (EPA)	96
	1	ĺ	macrochirus		

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
trisodium citrate	EC 50	> 50		Weight of evidence	
alkyl alcohol ethoxylate	EC 50	1 - 10	Daphnia magna Straus	OECD 202, static	48
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	EC 50	0.073	Daphnia magna Straus	OECD 202 (EU C.2)	48
tetrasodium ethylene diamine tetraacetate	EC 50	140	Daphnia magna Straus	DIN 38412, Part 11	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	
alkyl alcohol ethoxylate	EC 50	1 - 10	Desmodesmus subspicatus	OECD 201, static	72
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	Er C 50	0.054	Pseudokirchner iella subcapitata	OECD 201 (EU C.3)	96
tetrasodium ethylene diamine tetraacetate	EC 50	> 100	Scenedesmus obliquus	88/302/EEC, Part C, static	72

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
trisodium citrate		No data			
		available			
alkyl alcohol ethoxylate		No data			
		available			
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine		No data			
		available			
tetrasodium ethylene diamine tetraacetate		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			
alkyl alcohol ethoxylate	EC 10	> 10000	Activated sludge	DIN 38412 / Part 8	17 hour(s)
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	EC 50	18	Activated sludge	OECD 209	3 hour(s)
tetrasodium ethylene diamine tetraacetate	EC 20	> 500	Activated sludge	OECD 209	0.5 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				
alkyl alcohol ethoxylate		No data available				
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine		No data available				
tetrasodium ethylene diamine tetraacetate	NOEC	> 25.7	Brachydanio rerio	OECD 210	35 day(s)	

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
trisodium citrate		No data available				
alkyl alcohol ethoxylate		No data available				
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	NOEC	0.024	Daphnia magna	OECD 211	21 day(s)	
tetrasodium ethylene diamine tetraacetate	NOEC	25	Daphnia	OECD 211	21 day(s)	

magna

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				
alkyl alcohol ethoxylate		No data				
		available				
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine		No data				
		available				
tetrasodium ethylene diamine tetraacetate		No data				
		available				

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

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
alkyl alcohol ethoxylate	NOEC	220	Eisenia fetida			
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	LD 50	> 1000	Eisenia fetida	OECD 207	14	
tetrasodium ethylene diamine tetraacetate	LD 50	156	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
alkyl alcohol ethoxylate	NOEC	10	Lepidium sativum	OECD 208		
tetrasodium ethylene diamine tetraacetate	NOEC	0.25 - 1.25		·	21	

Terrestrial toxicity - birds, if available:

Terrestrial toxicity - beneficial insects, if available:

Terrestrial toxicity - soil bacteria, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
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
tetrasodium ethylene diamine tetraacetate	No data available			

Abiotic degradation - hydrolysis, if available:

Ingredient(s)	Half-life time in fresh water	Method	Evaluation	Remark
tetrasodium ethylene diamine tetraacetate	No data available			

Abiotic degradation - other processes, if available:

A IDIO IIO GOGI GGGGGGG	talotto degladation other proceedes, il available.								
Ingredient(s)	Туре	Half-life time	Method	Evaluation	Remark				
tetrasodium ethylene		No data available							
diamine tetraacetate									

Biodegradation

Ingredient(s)	Inoculum	Analytical method	DT 50	Method	Evaluation
trisodium citrate		DOC reduction	97 % in 28 day(s)	OECD 301E	Readily biodegradable
alkyl alcohol ethoxylate	Activated sludge, aerobe	CO ₂ production	> 60 % in 28 day(s)	OECD 301B	Readily biodegradable
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	Activated sludge, aerobe	Oxygen depletion	79 % in 28 day(s)	OECD 301D	Readily biodegradable
tetrasodium ethylene diamine tetraacetate				Weight of evidence	Not readily biodegradable.

Ready biodegradability - anaerobic and marine conditions, if available:

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

	method		
tetrasodium ethylene diamine tetraacetate			No data available

Degradation in relevant environmental compartments, if available:

	Ingredient(s)	Medium & Type	Analytical method	DT 50	Method	Evaluation
ĺ	tetrasodium ethylene diamine tetraacetate					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	
alkyl alcohol ethoxylate	4.09	QSAR	No bioaccumulation expected	
N-(3-aminopropyl)-N-dodecylpropane-1, 3-diamine	-0.66		No bioaccumulation expected	
tetrasodium ethylene diamine tetraacetate	-3.86	Method not given	No bioaccumulation expected	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
trisodium citrate	3.2			No bioaccumulation expected	
alkyl alcohol ethoxylate	-			No bioaccumulation expected	
N-(3-aminopropyl)-N-do decylpropane-1,3-diami ne					
tetrasodium ethylene diamine tetraacetate	1.8	Lepomis macrochirus	OECD 305	Low potential for bioaccumulation	

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				
alkyl alcohol ethoxylate	No data available				Immobile in soil or sediment
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	No data available				
tetrasodium ethylene diamine tetraacetate	No data available				Adsorption to solid soil phase is not expected

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:

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 or ID number: 1760 14.2 UN proper shipping name:

Corrosive liquid, n.o.s. (trisodium citrate, N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine)

14.3 Transport hazard class(es):

Transport hazard class (and subsidiary risks): 8

14.4 Packing group: III

14.5 Environmental hazards:

Environmentally hazardous: Yes

Marine pollutant: Yes

14.6 Special precautions for user: None known.

14.7 Maritime transport in bulk according to IMO instruments: 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

National regulations:

- Regulation (EC) 1907/2006 REACH (UK amended)
 Regulation (EC) 1272/2008 CLP (UK amended)
- Regulation (EC) 648/2004 Detergents regulation (UK amended)
- Biocidal Products Regulations 2001 (SI 2001/880)
- Delegated Regulation (EU) 2017/2100 and Regulation (EU) 2018/605 (UK amended)
- 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 Detergents Regulation

5 - 15 % non-ionic surfactants EDTA and salts thereof < 5 %

Laurylamine Dipropylenediamine, disinfectants

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) 648/2004 on detergents (UK amended). Data to support this assertion are held at the disposal of the competent authorities of the UK and will be made available to them, at their direct request or at the request of a detergent manufacturer.

Comah - classification: E1 - Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1

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: MS1004237 Version: 02.1 Revision: 2024-12-24

Reason for revision:

This data sheet contains changes from the previous version in section(s):, 1, 8, 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.

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
 H301 Toxic if swallowed.

- H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
- H318 Causes serious eye damage.
- H332 Harmful if inhaled.
- 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.

End of Safety Data Sheet