

Horizon Sanisoft

Revision: 2015-07-12

Version: 02.1

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

1.1 Product identifier

Trade name: Horizon Sanisoft

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

Identified uses:

For professional and industrial use only.

AISE-P104 - Conditioner (softener/starch). Automatic process

AISE-P105 - Conditioner (softener/starch). Semi-automatic process

Disinfectant for closed systems or equipment (AISE_CSP02 & AISE_CSP05)

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

1.3 Details of the supplier of the safety data sheet

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

Contact details

Diversey Ltd

Weston Favell Centre, Northampton NN3 8PD, United Kingdom

Tel: 01604 405311, Fax: 01604 406809

Regulatory Email: MSDSinfoUK@sealedair.com

1.4 Emergency telephone number

For medical or environmental emergency only:

call 0800 052 0185

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

The product has been classified and labelled in accordance with Regulation (EC) No 1272/2008.

Skin Corr. 1B (H314)

Aquatic Acute 1 (H400)

Aquatic Chronic 3 (H412)

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

Indication of danger

C - Corrosive

N - Dangerous for the environment

Risk phrases:

R34 - Causes burns.

R50 - Very toxic to aquatic organisms.

2.2 Label elements



Signal word: Danger.

Contains didecyldimethylammonium chloride (Didecyldimonium Chloride).

Hazard statements:

H314 - Causes severe skin burns and eye damage.

H410 - Very toxic to aquatic life with long lasting effects.

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Precautionary statements:

P280 - Wear protective gloves, protective clothing and eye or face protection.

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 - Immediately call a POISON CENTRE, doctor or physician.

2.3 Other hazards

No other hazards known. The product does not meet the criteria for PBT or vPvB in accordance with Regulation (EC) No 1907/2006, Annex XIII.

SECTION 3: Composition/information on ingredients**3.2 Mixtures**

Ingredient(s)	EC number	CAS number	REACH number	Classification	Classification (1999/45/EC)	Notes	Weight percent
didecyltrimethylammonium chloride	230-525-2	7173-51-5	No data available	Skin Corr. 1B (H314) Acute Tox. 4 (H302) Aquatic Acute 1 (H400) Aquatic Chronic 2 (H411)	Xn;R22 C;R34 N;R50		10-20
9-octadecenoic acid (Z)-, reaction products with triethanolamine, di-Me sulfate-quaternized	302-242-5	94095-35-9	No data available	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319)	Xi;R36/38		3-10
citric acid	201-069-1	77-92-9	[1]	Eye Irrit. 2 (H319)	Xi;R36		3-10
propan-2-ol	200-661-7	67-63-0	01-2119457558-25	Flam. Liq. 2 (H225) STOT SE 3 (H336) Eye Irrit. 2 (H319)	F;R11 Xi;R36 R67		1-3
propane-1,2-diol	200-338-0	57-55-6	01-2119456809-23	Not classified	-		1-3

* Polymer.

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 R, 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:

Wash skin with plenty of lukewarm, gently flowing water for at least 30 minutes. Take off immediately all contaminated clothing and wash it before re-use. Immediately call a POISON CENTRE, doctor or physician.

Eye contact:

Immediately rinse eyes cautiously with lukewarm water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE, doctor or physician.

Ingestion:

Rinse mouth. Immediately drink 1 glass of water. Do NOT induce vomiting. Keep at rest. Immediately call a POISON CENTRE, doctor or physician.

Self-protection of first aider:

Consider personal protective equipment as indicated in subsection 8.2.

4.2 Most important symptoms and effects, both acute and delayed**Inhalation:**

No known effects or symptoms in normal use.

Skin contact:

Causes severe burns.

Eye contact:

Causes severe or permanent damage.

Ingestion:

Ingestion will lead to a strong caustic effect on mouth and throat and to the danger of perforation of oesophagus and stomach.

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

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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 protective clothing, gloves and 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

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

6.4 Reference to other sections

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

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Measures to prevent fire and explosions:

No special precautions required.

Measures required to protect the environment:

For environmental exposure controls see subsection 8.2.

Advices on general occupational hygiene:

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not mix with other products unless advised by Sealed Air. Wash hands before breaks and at the end of workday. Wash face, hands and any exposed skin thoroughly after handling. Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. Use personal protective equipment as required. Avoid contact with skin and eyes. Use only with adequate ventilation.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local and national regulations. Keep only in original container. Store in a closed container. For conditions to avoid see subsection 10.4. For incompatible materials see subsection 10.5.

7.3 Specific end use(s)

No specific advice for end use available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Workplace exposure limits

Air limit values, if available:

Ingredient(s)	UK - Long term value(s)	UK - Short term value(s)
propan-2-ol	400 ppm 999 mg/m ³	500 ppm 1250 mg/m ³
propane-1,2-diol	150 ppm total particulates and vapour 474 mg/m ³ total particulates and vapour 10 mg/m ³ particulates	450 ppm total particulate and vapour 1422 mg/m ³ total particulate and vapour 30 mg/m ³ particulate

Biological limit values, if available:

Recommended monitoring procedures, if available:

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

DNEL/DMEL and PNEC values

Human exposure

DNEL oral exposure - Consumer (mg/kg bw)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
didecyldimethylammonium chloride	No data available	No data available	No data available	No data available
9-octadecenoic acid (Z)-, reaction products with triethanolamine, di-Me sulfate-quaternized	No data available	No data available	No data available	No data available
citric acid	-	-	-	-
propan-2-ol	-	-	-	26
propane-1,2-diol	-	-	-	-

DNEL dermal exposure - Worker

Ingredient(s)	Short term - Local effects	Short term - Systemic effects (mg/kg bw)	Long term - Local effects	Long term - Systemic effects (mg/kg bw)

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didecyldimethylammonium chloride	No data available	No data available	No data available	No data available
9-octadecenoic acid (Z)-, reaction products with triethanolamine, di-Me sulfate-quaternized	No data available	No data available	No data available	No data available
citric acid	No data available	-	No data available	-
propan-2-ol	No data available	-	No data available	888
propane-1,2-diol	No data available	-	No data available	-

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)
didecyldimethylammonium chloride	No data available	No data available	No data available	No data available
9-octadecenoic acid (Z)-, reaction products with triethanolamine, di-Me sulfate-quaternized	No data available	No data available	No data available	No data available
citric acid	No data available	-	No data available	-
propan-2-ol	No data available	-	No data available	319
propane-1,2-diol	No data available	-	No data available	-

DNEL inhalatory exposure - Worker (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
didecyldimethylammonium chloride	No data available	No data available	No data available	No data available
9-octadecenoic acid (Z)-, reaction products with triethanolamine, di-Me sulfate-quaternized	No data available	No data available	No data available	No data available
citric acid	-	-	-	-
propan-2-ol	-	-	-	500
propane-1,2-diol	-	-	10	168

DNEL inhalatory exposure - Consumer (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
didecyldimethylammonium chloride	No data available	No data available	No data available	No data available
9-octadecenoic acid (Z)-, reaction products with triethanolamine, di-Me sulfate-quaternized	No data available	No data available	No data available	No data available
citric acid	-	-	-	-
propan-2-ol	-	-	-	89
propane-1,2-diol	-	-	10	50

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)
didecyldimethylammonium chloride	No data available	No data available	No data available	No data available
9-octadecenoic acid (Z)-, reaction products with triethanolamine, di-Me sulfate-quaternized	No data available	No data available	No data available	No data available
citric acid	0.44	0.044	-	> 1000
propan-2-ol	140.9	140.9	140.9	2251
propane-1,2-diol	260	26	183	20000

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m ³)
didecyldimethylammonium chloride	No data available	No data available	No data available	No data available
9-octadecenoic acid (Z)-, reaction products with triethanolamine, di-Me sulfate-quaternized	No data available	No data available	No data available	No data available
citric acid	34.6	3.46	33.1	-
propan-2-ol	552	552	28	-
propane-1,2-diol	572	57.2	50	-

8.2 Exposure controls

The following information applies for the uses indicated in subsection 1.2.

If available, please refer to the product information sheet for application and handling instructions.

Normal use conditions are assumed for this section.

Recommended safety measures for handling the undiluted product:

Appropriate engineering controls: The product is intended to be used in closed systems.
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). The use of a full-face shield or other full-face protection is strongly recommended when handling open containers or if splashes may occur.

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.

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Suggested gloves for prolonged contact:

Material: butyl rubber

Penetration time: ≥ 480 minMaterial thickness: ≥ 0.7 mm

Suggested gloves for protection against splashes:

Material: nitrile rubber

Penetration time: ≥ 30 minMaterial thickness: ≥ 0.4 mm

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

Body protection: Wear chemical-resistant clothing and boots in case direct dermal exposure and/or splashes may occur.**Respiratory protection:** No special requirements under normal use conditions.**Environmental exposure controls:** Should not reach sewage water or drainage ditch undiluted or unneutralised.**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties**

Information in this section refers to the product, unless it is specifically stated that substance data is listed

Method / remark**Physical State:** Liquid**Colour:** Clear, Blue**Odour:** Slightly perfumed**Odour threshold:** Not applicable**pH:** ≈ 2 (neat)**Melting point/freezing point (°C):** Not determined**Initial boiling point and boiling range (°C):** Not determined

Substance data, boiling point

Ingredient(s)	Value (°C)	Method	Atmospheric pressure (hPa)
didecyldimethylammonium chloride	No data available		
9-octadecenoic acid (Z)-, reaction products with triethanolamine, di-Me sulfate-quaternized	No data available		
citric acid	No data available		
propan-2-ol	82	Method not given	1013
propane-1,2-diol	185-190	Method not given	1013

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

Substance data, flammability or explosive limits, if available:

Ingredient(s)	Lower limit (% vol)	Upper limit (% vol)
propan-2-ol	2	13
propane-1,2-diol	2.6	12.6

Method / remark**Vapour pressure:** Not determined

Substance data, vapour pressure

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
didecyldimethylammonium chloride	No data available		
9-octadecenoic acid (Z)-, reaction products with triethanolamine, di-Me sulfate-quaternized	No data available		
citric acid	No data available		
propan-2-ol	4200	Method not given	20
propane-1,2-diol	18.6	Method not given	20

Method / remark**Vapour density:** Not determined**Relative density:** 0.99 g/cm³ (20 °C)**Solubility in / Miscibility with Water:** Fully miscible

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
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didecyldimethylammonium chloride	No data available		
9-octadecenoic acid (Z)-, reaction products with triethanolamine, di-Me sulfate-quaternized	No data available		
citric acid	1630	Method not given	
propan-2-ol	Soluble	Method not given	
propane-1,2-diol	Soluble	Method not given	

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

Method / remark

Autoignition temperature: Not determined
Decomposition temperature: Not applicable.
Viscosity: ≈ 40 mPa.s (20 °C)
Explosive properties: Not explosive.
Oxidising properties: Not oxidising

9.2 Other information

Surface tension (N/m): Not determined
Corrosion to metals: Not corrosive

UN Manual of Tests and Criteria, section 37

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 alkali. Keep away from products containing chlorine-based bleaching agents or sulphites.

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)
didecyldimethylammonium chloride	LD ₅₀	300 - 2000	Rat	OECD 401 (EU B.1)	
9-octadecenoic acid (Z)-, reaction products with triethanolamine, di-Me sulfate-quaternized		No data available			
citric acid	LD ₅₀	3000	Rat	Method not given	
propan-2-ol	LD ₅₀	3570	Rat	Method not given	-
propane-1,2-diol	LD ₅₀	> 10000	Rat	Method not given	

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
didecyldimethylammonium chloride		No data available			
9-octadecenoic acid (Z)-, reaction products with triethanolamine, di-Me sulfate-quaternized		No data available			
citric acid	LD ₅₀	> 2000	Rat	Method not given	
propan-2-ol	LD ₅₀	> 2000	Rabbit	Method not given	-

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propane-1,2-diol	LD ₅₀	> 2000	Rabbit	Method not given	
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Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
didecyldimethylammonium chloride		No data available			
9-octadecenoic acid (Z)-, reaction products with triethanolamine, di-Me sulfate-quaternized		No data available			
citric acid		No data available			
propan-2-ol	LC ₅₀	> 25 (vapour)	Rat	OECD 403 (EU B.2)	6
propane-1,2-diol		No data available			

Irritation and corrosivity

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
didecyldimethylammonium chloride	Corrosive	Rabbit	OECD 404 (EU B.4)	
9-octadecenoic acid (Z)-, reaction products with triethanolamine, di-Me sulfate-quaternized	No data available			
citric acid	Not irritant	Rabbit	OECD 404 (EU B.4)	
propan-2-ol	Not irritant	Rabbit	OECD 404 (EU B.4)	
propane-1,2-diol	Not irritant	Rabbit	OECD 404 (EU B.4)	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
didecyldimethylammonium chloride	No data available			
9-octadecenoic acid (Z)-, reaction products with triethanolamine, di-Me sulfate-quaternized	No data available			
citric acid	Severe damage	Rabbit	OECD 405 (EU B.5)	
propan-2-ol	Irritant	Rabbit	OECD 405 (EU B.5)	
propane-1,2-diol	Not corrosive or irritant	Rabbit	OECD 405 (EU B.5)	

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
didecyldimethylammonium chloride	No data available			
9-octadecenoic acid (Z)-, reaction products with triethanolamine, di-Me sulfate-quaternized	No data available			
citric acid	No data available			
propan-2-ol	No data available			
propane-1,2-diol	No data available			

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
didecyldimethylammonium chloride	No data available			
9-octadecenoic acid (Z)-, reaction products with triethanolamine, di-Me sulfate-quaternized	No data available			
citric acid	Not sensitising	Guinea pig	Method not given	
propan-2-ol	Not sensitising	Guinea pig	OECD 406 (EU B.6) / Buehler test	-
propane-1,2-diol	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
didecyldimethylammonium chloride	No data available			
9-octadecenoic acid (Z)-, reaction products with triethanolamine, di-Me sulfate-quaternized	No data available			
citric acid	No data available			
propan-2-ol	No data available			-
propane-1,2-diol	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)
didecyldimethylammonium chloride	No data available		No data available	
9-octadecenoic acid (Z)-, reaction products with triethanolamine, di-Me sulfate-quaternized	No data available		No data available	
citric acid	No data available		No evidence of genotoxicity, negative test results	Method not given
propan-2-ol	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13)	No data available	

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propane-1,2-diol	No evidence for mutagenicity, negative test results	Method not given	No data available	
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Carcinogenicity

Ingredient(s)	Effect
didecyldimethylammonium chloride	No data available
9-octadecenoic acid (Z)-, reaction products with triethanolamine, di-Me sulfate-quaternized	No data available
citric acid	No evidence for carcinogenicity, negative test results
propan-2-ol	No data available
propane-1,2-diol	No evidence for carcinogenicity, negative test results

Toxicity for reproduction

Ingredient(s)	Endpoint	Specific effect	Value (mg/kg bw/d)	Species	Method	Exposure time	Remarks and other effects reported
didecyldimethylammonium chloride			No data available				
9-octadecenoic acid (Z)-, reaction products with triethanolamine, di-Me sulfate-quaternized			No data available				
citric acid			No data available				No evidence for reproductive toxicity
propan-2-ol			No data available				
propane-1,2-diol			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
didecyldimethylammonium chloride		No data available				
9-octadecenoic acid (Z)-, reaction products with triethanolamine, di-Me sulfate-quaternized		No data available				
citric acid		No data available				
propan-2-ol		No data available			-	
propane-1,2-diol		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
didecyldimethylammonium chloride		No data available				
9-octadecenoic acid (Z)-, reaction products with triethanolamine, di-Me sulfate-quaternized		No data available				
citric acid		No data available				
propan-2-ol		No data available			-	
propane-1,2-diol		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
didecyldimethylammonium chloride		No data available				
9-octadecenoic acid (Z)-, reaction products with triethanolamine, di-Me sulfate-quaternized		No data available				
citric acid		No data available				
propan-2-ol		No data available			-	
propane-1,2-diol		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
didecyldimethylammonium chloride			No data available					
9-octadecenoic acid (Z)-, reaction products with triethanolamine, di-Me sulfate-quaternized			No data available					
citric acid			No data					

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			available				
propan-2-ol			No data available				
propane-1,2-diol			No data available				

STOT-single exposure

Ingredient(s)	Affected organ(s)
didecyldimethylammonium chloride	No data available
9-octadecenoic acid (Z)-, reaction products with triethanolamine, di-Me sulfate-quaternized	No data available
citric acid	No data available
propan-2-ol	No data available
propane-1,2-diol	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
didecyldimethylammonium chloride	No data available
9-octadecenoic acid (Z)-, reaction products with triethanolamine, di-Me sulfate-quaternized	No data available
citric acid	No data available
propan-2-ol	No data available
propane-1,2-diol	No data available

Aspiration hazard

Substances with an aspiration hazard (H304), if any, are listed in section 3. If relevant, see section 9 for dynamic viscosity and relative density of the product.

Potential adverse health effects and symptoms

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

SECTION 12: Ecological information**12.1 Toxicity**

No data is available on the mixture.

Substance data, where relevant and available, are listed below

Aquatic short-term toxicity

Aquatic short-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
didecyldimethylammonium chloride	LC ₅₀	0.1 - 1	<i>Brachydanio rerio</i>	OECD 203	96
9-octadecenoic acid (Z)-, reaction products with triethanolamine, di-Me sulfate-quaternized		No data available			
citric acid	LC ₅₀	440	<i>Leuciscus idus</i>	Method not given	48
propan-2-ol	LC ₅₀	> 100	<i>Pimephales promelas</i>	Method not given	48
propane-1,2-diol	LC ₅₀	> 1000	<i>Fish</i>	Method not given	24

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
didecyldimethylammonium chloride	EC ₅₀	0.1 - 1	<i>Daphnia magna Straus</i>	OECD 202	48
9-octadecenoic acid (Z)-, reaction products with triethanolamine, di-Me sulfate-quaternized		No data available			
citric acid	EC ₅₀	1535	<i>Daphnia magna Straus</i>	Method not given	24
propan-2-ol	EC ₅₀	> 100	<i>Daphnia magna Straus</i>	Method not given	48
propane-1,2-diol	EC ₅₀	> 100	<i>Daphnia</i>	Method not given	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
didecyldimethylammonium chloride	EC ₅₀	0.1 - 1	<i>Pseudokirchneriella subcapitata</i>	OECD 201	72
9-octadecenoic acid (Z)-, reaction products with triethanolamine, di-Me sulfate-quaternized		No data available			
citric acid	LC ₅₀	425	<i>Scenedesmus quadricauda</i>	Method not given	168
propan-2-ol	EC ₅₀	> 100	<i>Scenedesmus quadricauda</i>	Method not given	72
propane-1,2-diol	EC ₅₀	24200	<i>Desmodesmus subspicatus</i>	OECD 201	72

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Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
didecyltrimethylammonium chloride		No data available			-
9-octadecenoic acid (Z)-, reaction products with triethanolamine, di-Me sulfate-quaternized		No data available			
citric acid		No data available			-
propan-2-ol		No data available			-
propane-1,2-diol		No data available			-

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
didecyltrimethylammonium chloride		No data available			
9-octadecenoic acid (Z)-, reaction products with triethanolamine, di-Me sulfate-quaternized		No data available			
citric acid	EC ₅₀	> 10000	<i>Pseudomonas putida</i>	Method not given	16 hour(s)
propan-2-ol	EC ₅₀	> 1000	<i>Activated sludge</i>	Method not given	
propane-1,2-diol	EC ₀	> 20000	<i>Pseudomonas putida</i>	Method not given	18 hour(s)

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
didecyltrimethylammonium chloride		No data available				
9-octadecenoic acid (Z)-, reaction products with triethanolamine, di-Me sulfate-quaternized		No data available				
citric acid		No data available				
propan-2-ol		No data available				
propane-1,2-diol		No data available				

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
didecyltrimethylammonium chloride		No data available				
9-octadecenoic acid (Z)-, reaction products with triethanolamine, di-Me sulfate-quaternized		No data available				
citric acid		No data available				
propan-2-ol		No data available				
propane-1,2-diol	NOEC	13020	<i>Ceriodaphnia dubia</i>	Method not given	7 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
didecyltrimethylammonium chloride		No data available			-	
9-octadecenoic acid (Z)-, reaction products with triethanolamine, di-Me sulfate-quaternized		No data available				
citric acid		No data available			-	
propan-2-ol		No data available			-	
propane-1,2-diol		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
didecyltrimethylammonium chloride		No data available			-	
citric acid		No data available			-	
propan-2-ol		No data available			-	

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propane-1,2-diol		No data available			-	
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Terrestrial toxicity - plants, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
didecyldimethylammonium chloride		No data available			-	
citric acid		No data available			-	
propan-2-ol		No data available			-	
propane-1,2-diol		No data available			-	

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
didecyldimethylammonium chloride		No data available			-	
citric acid		No data available			-	
propan-2-ol		No data available			-	
propane-1,2-diol		No data available			-	

Terrestrial toxicity - beneficial insects, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
didecyldimethylammonium chloride		No data available			-	
citric acid		No data available			-	
propan-2-ol		No data available			-	
propane-1,2-diol		No data available			-	

Terrestrial toxicity - soil bacteria, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
didecyldimethylammonium chloride		No data available			-	
citric acid		No data available			-	
propan-2-ol		No data available			-	
propane-1,2-diol		No data available			-	

12.2 Persistence and degradability

Abiotic degradation

Abiotic degradation - photodegradation in air, if available:

Abiotic degradation - hydrolysis, if available:

Abiotic degradation - other processes, if available:

Biodegradation

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT ₅₀	Method	Evaluation
didecyldimethylammonium chloride		Oxygen depletion	> 60%	OECD 301D	Readily biodegradable
9-octadecenoic acid (Z)-, reaction products with triethanolamine, di-Me sulfate-quaternized					No data available
citric acid			97 % in 28 day(s)	Method not given	Readily biodegradable
propan-2-ol			95 % in 21 day(s)	OECD 301E	Readily biodegradable
propane-1,2-diol			> 70 % in 28 day(s)	OECD 301A	Readily biodegradable

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

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

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12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
didecyldimethylammonium chloride	No data available			
9-octadecenoic acid (Z)-, reaction products with triethanolamine, di-Me sulfate-quaternized	No data available			
citric acid	-1.72		No bioaccumulation expected	
propan-2-ol	0.05	OECD 107	No bioaccumulation expected	
propane-1,2-diol	-1.07	Method not given	No bioaccumulation expected	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
didecyldimethylammonium chloride	2.1		Method not given	No bioaccumulation expected	
9-octadecenoic acid (Z)-, reaction products with triethanolamine, di-Me sulfate-quaternized	No data available				
citric acid	No data available				
propan-2-ol	No data available				
propane-1,2-diol	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
didecyldimethylammonium chloride	No data available				
9-octadecenoic acid (Z)-, reaction products with triethanolamine, di-Me sulfate-quaternized	No data available				
citric acid	No data available				Potential for mobility in soil, soluble in water
propan-2-ol	No data available				Potential for mobility in soil, soluble in water
propane-1,2-diol	No data available				Potential for mobility in soil, soluble in water

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.
20 01 14* - acids.

European Waste Catalogue:**Empty packaging****Recommendation:**

Dispose of observing national or local regulations.

Suitable cleaning agents:

Water, if necessary with cleaning agent.

SECTION 14: Transport information**ADR, RID, ADN, IMO/IMDG, ICAO/IATA****14.1 UN number:** 3265**14.2 UN proper shipping name:**

Corrosive liquid, acidic, organic, n.o.s. (didecyldimethylammoniumchloride)

14.3 Transport hazard class(es):**Class:** 8**Label(s):** 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 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:** The product is not transported in bulk tankers.**Other relevant information:****ADR**

Classification code: C3

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**

Authorisations or restrictions (Regulation (EC) No 1907/2006, Title VII respectively Title VIII): Not applicable.

Ingredients according to EC Detergents Regulation 648/2004

cationic surfactants 5 - 15%
disinfectants, perfumes, Hexyl Cinnamal, Benzyl Salicylate, Alpha-Isomethyl Ionone, Citronellol,
Linalool

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: MSDSGB0976

Version: 02.1

Revision: 2015-07-12

Reason for revision:

This data sheet contains changes from the previous version in section(s):, 8, 9

Classification procedure

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

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

- H225 - Highly flammable liquid and vapour.
- H302 - Harmful if swallowed.
- H314 - Causes severe skin burns and eye damage.
- H315 - Causes skin irritation.
- H319 - Causes serious eye irritation.
- H336 - May cause drowsiness or dizziness.
- H400 - Very toxic to aquatic life.
- H411 - Toxic to aquatic life with long lasting effects.
- R11 - Highly flammable.
- R22 - Harmful if swallowed.
- R34 - Causes burns.
- R36 - Irritating to eyes.
- R38 - Irritating to skin.
- R50 - Very toxic to aquatic organisms.
- R67 - Vapours may cause drowsiness and dizziness.

Abbreviations and acronyms:

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

End of Safety Data Sheet