

# Safety Data Sheet

According to Regulation (EC) No 1907/2006

# **Room Care R1-plus**

**Revision:** 2018-12-09 **Version:** 01.3

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

#### 1.1 Product identifier

Trade name: Room Care R1-plus

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

#### Identified uses:

For professional use only.

AISE-P305 - Sanitary cleaner. Manual process

AISE-P306 - Sanitary cleaner. Spray and wipe manual process

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

#### 1.3 Details of the supplier of the safety data sheet

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

#### **Contact details**

Diversey Ltd

Weston Favell Centre, Northampton NN3 8PD, United Kingdom

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Regulatory Email: customerservice.uk@diversey.com

#### 1.4 Emergency telephone number

For medical or environmental emergency only:

call 0800 052 0185

# SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

Skin Corr. 1B (H314) Eye Dam. 1 (H318) Aquatic Acute 1 (H400) Aquatic Chronic 2 (H411) Met. Corr. 1 (H290)

#### 2.2 Label elements



Signal word: Danger.

Contains quaternary ammonium compounds, trimethyltallow alkyl, chlorides (Tallowtrimonium Chloride)

#### Hazard statements:

H314 - Causes severe skin burns and eye damage.

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

H290 - May be corrosive to metals.

#### 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	Notes	Weight percent
citric acid	201-069-1	77-92-9	[1]	Eye Irrit. 2 (H319)		20-30
quaternary ammonium compounds, trimethyltallow alkyl, chlorides	232-447-4	8030-78-2	01-2119970170-45	Acute Tox. 3 (H311) Skin Corr. 1B (H314) Acute Tox. 4 (H302) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)		3-10
propane-1,2-diol	200-338-0	57-55-6	01-2119456809-23	Not classified as hazardous		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)		3-10
sodium xylene sulphonate	215-090-9	1300-72-7	01-2119513350-56	Eye Irrit. 2 (H319)		1-3
dimethyl tallow alkyl amines hydrochlorides	-	-	-	Skin Corr. 1B (H314) Acute Tox. 4 (H302) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)		0.1-1

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

- [1] Exempted: ionic mixture. See Regulation (EC) No 1907/2006, Annex V, paragraph 3 and 4. This salt is potentially present, based on calculation, and included
- for classification and labelling purposes only. Each starting material of the ionic mixture is registered, as required. [2] Exempted: included in Annex IV of Regulation (EC) No 1907/2006.
- [3] Exempted: Annex V of Regulation (EC) No 1907/2006.

[4] Exempted: polymer. See Article 2(9) of Regulation (EC) No 1907/2006. For the full text of the H and EUH phrases mentioned in this Section, see Section 16.

#### **SECTION 4: First aid measures**

4.1 Description of first aid measures

**General Information:** If unconscious place in recovery position and seek medical advice. Provide fresh air. If breathing is

irregular or stopped, administer artificial respiration. No mouth-to-mouth or mouth-to-nose

resuscitation. Use Ambu bag or ventilator.

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

Wash skin with plenty of lukewarm, gently flowing water for at least 30 minutes. Take off Skin contact:

immediately all contaminated clothing and wash it before re-use. Immediately call a POISON

CENTRE, doctor or physician.

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. Do NOT induce vomiting. Keep at rest. Immediately call a POISON CENTRE, doctor or

physician.

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 severe burns.

Eve 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

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 adviced by Diversey. Wash hands before breaks and at the end of workday. Wash face, hands and any exposed skin thoroughly after handling. Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. 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. 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:

All lillit values, il avallable.		
Ingredient(s)	UK - Long term	UK - Short term
	value(s)	value(s)
propane-1,2-diol	150 ppm total	450 ppm total
	particulates and vapour	particulate and vapour
	474 mg/m <sup>3</sup> total	1422 mg/m <sup>3</sup> total
	particulates and vapour	particulate and vapour
	10 mg/m³ particulates	30 mg/m³ particulate
propan-2-ol	400 ppm	500 ppm
	999 mg/m <sup>3</sup>	1250 mg/m <sup>3</sup>

Biological limit values, if available:

Recommended monitoring procedures, if available:

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

# **DNEL/DMEL** and **PNEC** values

Human exposure

DNEL oral exposure - Consumer (mg/kg bw)

DIVEL drai exposure - Consumer (mg/kg bw)				
Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
citric acid	-	-	-	-
quaternary ammonium compounds, trimethyltallow alkyl, chlorides	-	-	-	2.83
propane-1,2-diol	-	-	-	-
propan-2-ol	-	-	-	26
sodium xylene sulphonate	-	-	-	3.8
dimethyl tallow alkyl amines hydrochlorides	No data available	No data available	No data available	No data available

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)
citric acid	No data available	-	No data available	-
quaternary ammonium compounds, trimethyltallow alkyl, chlorides	-	-	-	4.7

propane-1,2-diol	No data available	-	No data available	-
propan-2-ol	No data available	-	No data available	888
sodium xylene sulphonate	-	-	-	7.6
dimethyl tallow alkyl amines hydrochlorides	No data available	No data available	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)
citric acid	No data available	-	No data available	-
quaternary ammonium compounds, trimethyltallow alkyl, chlorides	-	-	-	2.83
propane-1,2-diol	No data available	-	No data available	-
propan-2-ol	No data available	-	-	319
sodium xylene sulphonate	-	-	-	3.8
dimethyl tallow alkyl amines hydrochlorides	No data available	No data available	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
citric acid	-	-	-	-
quaternary ammonium compounds, trimethyltallow alkyl, chlorides	-	-	-	3.32
propane-1,2-diol	-	-	10	168
propan-2-ol	-	-	-	500
sodium xylene sulphonate	-	-	-	53.6
dimethyl tallow alkyl amines hydrochlorides	No data available	No data available	No data available	No data available

DNEL inhalatory exposure - Consumer (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
citric acid	-	-	-	-
quaternary ammonium compounds, trimethyltallow alkyl, chlorides	-	-	-	0.98
propane-1,2-diol	-	-	10	50
propan-2-ol	-	-	-	89
sodium xylene sulphonate	-	-	-	13.2
dimethyl tallow alkyl amines hydrochlorides	No data available	No data available	No data available	No data available

#### **Environmental exposure**

Environmental exposure - PNE

Environmental exposure - 1 NEC				
Ingredient(s)	Surface water, fresh (mg/l)	Surface water, marine (mg/l)	Intermittent (mg/l)	Sewage treatment plant (mg/l)
-14-11-1				
citric acid	0.44	0.044	-	> 1000
quaternary ammonium compounds, trimethyltallow alkyl,	0.00068	0.000068	0.00013	1.1
chlorides				
propane-1,2-diol	260	26	183	20000
propan-2-ol	140.9	140.9	140.9	2251
sodium xylene sulphonate	0.23	0.023	2.3	100
dimethyl tallow alkyl amines hydrochlorides	No data available	No data available	No data available	No data available

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m³)
citric acid	34.6	3.46	33.1	-
quaternary ammonium compounds, trimethyltallow alkyl, chlorides	0.201	0.0201	7	-
propane-1,2-diol	572	57.2	50	-
propan-2-ol	552	552	28	-
sodium xylene sulphonate	0.862	0.0862	0.037	-
dimethyl tallow alkyl amines hydrochlorides	No data available	No data available	No data available	No data available

### 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  $\underline{\textit{undiluted}}$  product:

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

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

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

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

Personal protective equipment

Eye / face protection: Safety glasses or goggles (EN 166). The use of a full-face shield or other full-face protection is

strongly recommended when handling open containers or if splashes may occur.

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

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.

Wear chemical-resistant clothing and boots in case direct dermal exposure and/or splashes may **Body protection:** 

occur (EN 14605).

No special requirements under normal use conditions. Respiratory protection:

**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 (%): 10

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

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

Personal protective equipment

Eye / face protection: No special requirements under normal use conditions.

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

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

Respiratory protection: Respiratory protection is not normally required. However, inhalation of vapour, spray, gas or

aerosols should be avoided.

**Environmental exposure controls:** No special requirements under normal use conditions.

# SECTION 9: Physical and chemical properties

#### 9.1 Information on basic physical and chemical properties

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

Method / remark

Physical State: Liquid Colour: Clear, Blue Odour: Slightly perfumed Odour threshold: Not applicable

**pH**: < 2 (neat) ISO 4316

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

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

Substance data, boiling point

Ingredient(s)	Value (°C)	Method	Atmospheric pressure (hPa)
citric acid	No data available		
quaternary ammonium compounds, trimethyltallow alkyl, chlorides	No data available		
propane-1,2-diol	185-190	Method not given	1013
propan-2-ol	82	Method not given	1013
sodium xylene sulphonate	> 100	Method not given	
dimethyl tallow alkyl amines hydrochlorides	No data available		

Method / remark

Weight of evidence

closed cup

Flammability (liquid): Not flammable.

Flash point (°C): ≈ 51

Sustained combustion: The product does not sustain combustion

(UN Manual of Tests and Criteria, section 32, L.2)

Evaporation rate: Not determined

Flammability (solid, gas): Not applicable to liquids Upper/lower flammability limit (%): Not determined Not relevant to classification of this product

See substance data

Substance data flammability or explosive limits, if available

oubstance data, narrimability of explosive limits, if available.		
Ingredient(s)	Lower limit	Upper limit
	(% vol)	(% vol)
propane-1,2-diol	2.6	12.6
propan-2-ol	2	13

Method / remark

Vapour pressure: Not determined

See substance data

Substance data, vapour pressure

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
citric acid	No data available		
quaternary ammonium compounds, trimethyltallow alkyl, chlorides	No data available		
propane-1,2-diol	18.6	Method not given	20
propan-2-ol	4200	Method not given	20
sodium xylene sulphonate	Not applicable		
dimethyl tallow alkyl amines hydrochlorides	No data available		

Method / remark

Not applicable, no vapour pressure data available Not

relevant to classification of this product

OECD 109 (EU A.3)

Vapour density: Not determined

Relative density: ≈ 1.14 (20 °C)

Solubility in / Miscibility with Water: Fully miscible

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
citric acid	1630	Method not given	
quaternary ammonium compounds, trimethyltallow alkyl, chlorides	No data available		
propane-1,2-diol	Soluble	Method not given	
propan-2-ol	Soluble	Method not given	
sodium xylene sulphonate	664	Method not given	
dimethyl tallow alkyl amines hydrochlorides	No data available		

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

Method / remark

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

Viscosity: ≈ 60 mPa.s (20 °C)

Explosive properties: Not explosive. Vapours may form explosive mixtures with air.

Oxidising properties: Not oxidising. Not oxidising, based on substance properties

9.2 Other information

Surface tension (N/m): Not determined

Corrosion to metals: Corrosive

Not relevant to classification of this product

Weight of evidence

Substance data, dissociation constant, if available:

# **SECTION 10: Stability and reactivity**

### 10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

### 10.2 Chemical stability

Stable under normal storage and use conditions.

#### 10.3 Possibility of hazardous reactions

No hazardous reactions known under normal storage and use conditions.

#### 10.4 Conditions to avoid

None known under normal storage and use conditions.

# 10.5 Incompatible materials

Reacts with alkali and metals. 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

ATE - Dermal (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)
citric acid	LD 50	3000	Rat	Method not given	
quaternary ammonium compounds, trimethyltallow alkyl, chlorides	LD 50	300-2000	Rat	Method not given	
propane-1,2-diol	LD 50	> 10000	Rat	Method not given	
propan-2-ol	LD 50	3570	Rat	Method not given	
sodium xylene sulphonate	LD 50	> 7200	Rat	OECD 401 (EU B.1)	
dimethyl tallow alkyl amines hydrochlorides		No data available			

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
citric acid	LD 50	> 2000	Rat	Method not given	
quaternary ammonium compounds, trimethyltallow alkyl, chlorides	LD 50	200-1000			
propane-1,2-diol	LD 50	> 2000	Rabbit	Method not given	
propan-2-ol	LD 50	> 2000	Rabbit	Method not given	
sodium xylene sulphonate	LD 50	> 2000	Rabbit	EPA OPPTS 870.1200	
dimethyl tallow alkyl amines hydrochlorides		No data available			

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
citric acid		No data available			
quaternary ammonium compounds, trimethyltallow alkyl, chlorides		No data available			
propane-1,2-diol	LC 50	> 317 (mist) No mortality observed	Rabbit	Non guideline test	
propan-2-ol	LC 50	> 25 (vapour)	Rat	OECD 403 (EU B.2)	6
sodium xylene sulphonate	LC o	> 6.41 (mist)	Rat	Method not given	4
dimethyl tallow alkyl amines hydrochlorides		No data available			

# Irritation and corrosivity Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
citric acid	Not irritant	Rabbit	OECD 404 (EU B.4)	
quaternary ammonium compounds, trimethyltallow alkyl, chlorides	Corrosive			
propane-1,2-diol	Not irritant	Rabbit	OECD 404 (EU B.4)	
propan-2-ol	Not irritant	Rabbit	OECD 404 (EU B.4)	
sodium xylene sulphonate	Mild irritant	Rabbit	OECD 404 (EU B.4)	
dimethyl tallow alkyl amines hydrochlorides	No data available			

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
citric acid	Irritant	Rabbit	OECD 405 (EU B.5)	
quaternary ammonium compounds, trimethyltallow alkyl, chlorides	No data available			
propane-1,2-diol	Not corrosive or irritant	Rabbit	OECD 405 (EU B.5)	
propan-2-ol	Irritant	Rabbit	OECD 405 (EU B.5)	
sodium xylene sulphonate	Irritant	Rabbit	OECD 405 (EU B.5)	
dimethyl tallow alkyl amines hydrochlorides	No data available			

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
citric acid	No data available			
quaternary ammonium compounds, trimethyltallow alkyl, chlorides	No data available			
propane-1,2-diol	No data available			
propan-2-ol	No data available			
sodium xylene sulphonate	No data available			
dimethyl tallow alkyl amines hydrochlorides	No data available			

# Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
citric acid	Not sensitising	Guinea pig	Method not given	
quaternary ammonium compounds, trimethyltallow alkyl, chlorides	No data available			
propane-1,2-diol	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	
propan-2-ol	Not sensitising	Guinea pig	OECD 406 (EU B.6) / Buehler test	
sodium xylene sulphonate	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	
dimethyl tallow alkyl amines hydrochlorides	No data available			

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
citric acid	No data available			
quaternary ammonium compounds, trimethyltallow alkyl, chlorides	No data available			
propane-1,2-diol	No data available			
propan-2-ol	No data available			
sodium xylene sulphonate	No data available			
dimethyl tallow alkyl amines hydrochlorides	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)
citric acid	No data available		No evidence of genotoxicity, negative test results	Method not given
quaternary ammonium compounds, trimethyltallow alkyl, chlorides	No data available		No data available	
propane-1,2-diol	No evidence for mutagenicity, negative test results	Method not given	No data available	
propan-2-ol	No evidence for mutagenicity, negative test results No evidence of genotoxicity, negative test results		No evidence of genotoxicity, negative test results	OECD 474 (EU B.12)
sodium xylene sulphonate	No evidence for mutagenicity, negative test results		No evidence for mutagenicity, negative test results	OECD 474 (EU B.12)
dimethyl tallow alkyl amines hydrochlorides	No data available		No data available	

Carcinogenicity

Ingredient(s)	Effect
citric acid	No evidence for carcinogenicity, negative test results
quaternary ammonium compounds, trimethyltallow alkyl, chlorides	No data available
propane-1,2-diol	No evidence for carcinogenicity, negative test results
propan-2-ol	No data available
sodium xylene sulphonate	No evidence for carcinogenicity, negative test results
dimethyl tallow alkyl amines hydrochlorides	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
citric acid			No data available				No evidence for reproductive toxicity
quaternary ammonium compounds, trimethyltallow alkyl, chlorides			No data available				
propane-1,2-diol			No data available				No evidence for reproductive toxicity
propan-2-ol			No data available				
sodium xylene sulphonate	NOAEL	Teratogenic effects	> 936	Rat	Non guideline test		
dimethyl tallow alkyl amines hydrochlorides			No data available				

Repeated dose toxicity
Sub-acute or sub-chronic oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
citric acid		No data				
		available				
quaternary ammonium compounds, trimethyltallow alkyl,		No data				
chlorides		available				
propane-1,2-diol		No data				
		available				

propan-2-ol		No data				
		available				
sodium xylene sulphonate	NOAEL	763 - 3534	Rat	OECD 408 (EU	90	
				B.26)		
dimethyl tallow alkyl amines hydrochlorides		No data				
		available				

Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value	Species	Method		
		(mg/kg bw/d)			time (days)	affected
citric acid		No data				
		available				
quaternary ammonium compounds, trimethyltallow alkyl,		No data				
chlorides		available				
propane-1,2-diol		No data				
		available				
propan-2-ol		No data				
		available				
sodium xylene sulphonate	NOAEL	> 440		OECD 411 (EU	90	
				B.28)		
dimethyl tallow alkyl amines hydrochlorides		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
citric acid		No data				
		available				
quaternary ammonium compounds, trimethyltallow alkyl,		No data				
chlorides		available				
propane-1,2-diol		No data				
		available				
propan-2-ol		No data				
		available				
sodium xylene sulphonate		No data				
		available				
dimethyl tallow alkyl amines hydrochlorides		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
citric acid			No data available					
quaternary ammonium compounds, trimethyltallow alkyl, chlorides			No data available					
propane-1,2-diol			No data available					
propan-2-ol			No data available					
sodium xylene sulphonate	Oral		No data available	Rat	OECD 453 (EU B.33)	24 month(s)	No adverse effects observed	
dimethyl tallow alkyl amines hydrochlorides			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
citric acid	No data available
quaternary ammonium compounds, trimethyltallow alkyl, chlorides	No data available
propane-1,2-diol	No data available
propan-2-ol	No data available
sodium xylene sulphonate	No data available
dimethyl tallow alkyl amines hydrochlorides	No data available

STOT-repeated exposure

O 1 O 1 Tepedica exposure	
Ingredient(s)	Affected organ(s)
citric acid	No data available
quaternary ammonium compounds, trimethyltallow alkyl, chlorides	No data available
propane-1,2-diol	No data available
propan-2-ol	No data available
sodium xylene sulphonate	No data available
dimethyl tallow alkyl amines hydrochlorides	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)
citric acid	LC 50	440	Leuciscus idus	Method not given	48
quaternary ammonium compounds, trimethyltallow alkyl, chlorides	LC 50	> 0.1-1	Oncorhynchus mykiss	Method not given	96
propane-1,2-diol	LC 50	> 1000	Fish	Method not given	24
propan-2-ol	LC 50	> 100	Pimephales promelas	Method not given	48
sodium xylene sulphonate	LC 50	> 1000	Fish	EPA-OPPTS 850.1075	96
dimethyl tallow alkyl amines hydrochlorides		No data available			

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
citric acid	EC 50	1535	Daphnia magna Straus	Method not given	24
quaternary ammonium compounds, trimethyltallow alkyl, chlorides	EC 50	> 0.01-0.1	Daphnia	Read across	48
propane-1,2-diol	EC 50	> 100	Daphnia	Method not given	48
propan-2-ol	EC 50	> 100	Daphnia magna Straus	Method not given	48
sodium xylene sulphonate	EC 50	> 1000	Daphnia	EPA-OPPTS 850.1010	48
dimethyl tallow alkyl amines hydrochlorides		No data available			

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
citric acid	LC 50	425	Scenedesmus quadricauda	Method not given	168
quaternary ammonium compounds, trimethyltallow alkyl, chlorides	EC 50	> 0.01-0.1	Not specified	Read across	72
propane-1,2-diol	EC 50	24200	Desmodesmus subspicatus	OECD 201 (EU C.3)	72
propan-2-ol	EC 50	> 100	Scenedesmus quadricauda	Method not given	72
sodium xylene sulphonate	EC 50	> 230	Not specified	EPA OPPTS 850.5400	96
dimethyl tallow alkyl amines hydrochlorides		No data available			

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
citric acid		No data available			=
quaternary ammonium compounds, trimethyltallow alkyl, chlorides		No data available			=
propane-1,2-diol		No data available			-
propan-2-ol		No data available			-
sodium xylene sulphonate		No data available			-
dimethyl tallow alkyl amines hydrochlorides		No data available			

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
citric acid	EC 50	> 10000	Pseudomonas putida	Method not given	16 hour(s)
quaternary ammonium compounds, trimethyltallow alkyl, chlorides		No data available			
propane-1,2-diol	EC <sub>0</sub>	> 20000	Pseudomonas putida	Method not given	18 hour(s)
propan-2-ol	EC 50	> 1000	Activated	Method not given	

			sludge		
sodium xylene sulphonate	Er C 50	> 1000	Activated sludge	OECD 209	3 hour(s)
dimethyl tallow alkyl amines hydrochlorides		No data available			

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

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
citric acid		No data available				
quaternary ammonium compounds, trimethyltallow alkyl, chlorides		No data available				
propane-1,2-diol		No data available				
propan-2-ol		No data available				
sodium xylene sulphonate		No data available				
dimethyl tallow alkyl amines hydrochlorides		No data available				

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
citric acid		No data available				
quaternary ammonium compounds, trimethyltallow alkyl, chlorides	NOEC	> 0.001 - 0.01	Daphnia magna	OECD 211	21 day(s)	
propane-1,2-diol	NOEC	13020	Ceriodaphnia dubia	Method not given	7 day(s)	
propan-2-ol		No data available				
sodium xylene sulphonate		No data available				
dimethyl tallow alkyl amines hydrochlorides		No data available				

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
citric acid		No data available			-	
quaternary ammonium compounds, trimethyltallow alkyl, chlorides		No data available			-	
propane-1,2-diol		No data available			-	
propan-2-ol		No data available			-	
sodium xylene sulphonate		No data available			-	
dimethyl tallow alkyl amines hydrochlorides		No data available				

# Terrestrial toxicity Terrestrial toxicity - soil

Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Effects observed
		(mg/kg dw soil)			time (days)	
citric acid		No data			-	
		available				
quaternary ammonium compounds, trimethyltallow alkyl,		No data			-	
chlorides		available				
propane-1,2-diol		No data			-	
		available				
propan-2-ol		No data			-	
		available				
sodium xylene sulphonate		No data			-	
		available			1	

Terrestrial toxicity - plants, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
citric acid		No data available			-	
quaternary ammonium compounds, trimethyltallow alkyl, chlorides		No data available			-	
propane-1,2-diol		No data available			-	

available		
No data	-	
No	data	o data -

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
citric acid		No data			-	
		available				
quaternary ammonium compounds, trimethyltallow alkyl,		No data			-	
chlorides		available				
propane-1,2-diol		No data			-	
		available				
propan-2-ol		No data			-	
		available				
sodium xylene sulphonate		No data			-	
		available				

Terrestrial toxicity - beneficial insects, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
citric acid		No data available			-	
quaternary ammonium compounds, trimethyltallow alkyl, chlorides		No data available			-	
propane-1,2-diol		No data available			-	
propan-2-ol		No data available			-	
sodium xylene sulphonate		No data available			-	

Terrestrial toxicity - soil bacteria, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Effects observed
		(mg/kg dw soil)			time (days)	
citric acid		No data			-	
		available				
quaternary ammonium compounds, trimethyltallow alkyl,		No data			-	
chlorides		available				
propane-1,2-diol		No data			-	
		available				
propan-2-ol		No data			-	
		available				
sodium xylene sulphonate		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
citric acid			97 % in 28 day(s)		Readily biodegradable
quaternary ammonium compounds, trimethyltallow alkyl, chlorides	Activated sludge, aerobe	Oxygen depletion		OECD 301D	Readily biodegradable
propane-1,2-diol			> 70 % in 28 day(s)	OECD 301A	Readily biodegradable
propan-2-ol			95 % in 21 day(s)	OECD 301E	Readily biodegradable
sodium xylene sulphonate			99.8 % in 28 day(s)	OECD 301F	Readily biodegradable
dimethyl tallow alkyl amines hydrochlorides					No data available

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

# 12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
citric acid	-1.72		No bioaccumulation expected	

quaternary ammonium compounds, trimethyltallow alkyl, chlorides	No data available			
propane-1,2-diol	-1.07	Method not given	No bioaccumulation expected	
propan-2-ol	0.05	OECD 107	No bioaccumulation expected	
sodium xylene sulphonate	-3.12	Method not given	No bioaccumulation expected	
dimethyl tallow alkyl amines hydrochlorides	No data available			

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
citric acid	No data available				
quaternary ammonium compounds, trimethyltallow alkyl, chlorides	No data available				
propane-1,2-diol	No data available				
propan-2-ol	No data available				
sodium xylene sulphonate	No data available				
dimethyl tallow alkyl amines hydrochlorides	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
citric acid	No data available				Potential for mobility in soil, soluble in water
quaternary ammonium compounds, trimethyltallow alkyl, chlorides	No data available				
propane-1,2-diol	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
sodium xylene sulphonate	No data available				
dimethyl tallow alkyl amines hydrochlorides	No data available				

#### 12.5 Results of PBT and vPvB assessment

Substances that fulfill the criteria for PBT/vPvB, if any, are listed in section 3.

#### 12.6 Other adverse effects

No other adverse effects known.

# **SECTION 13: Disposal considerations**

13.1 Waste treatment methods Waste from residues / unused

**European Waste Catalogue:** 

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.

**Empty packaging** 

Recommendation: Suitable cleaning agents: 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**: 3265

14.2 UN proper shipping name:

Corrosive liquid, n.o.s. (citric acid, tallowtrimethylammoniumchloride)

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 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: 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

#### EU regulations:

- Regulation (EC) No. 1907/2006 REACH
- Regulation (EC) No 1272/2008 CLP
- Regulation (EC) No. 648/2004 Detergents regulation

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

UFI: AYR1-Q0A3-M00M-1VE2

#### Ingredients according to EC Detergents Regulation 648/2004

cationic surfactants

5 - 15 %

perfumes, Hexyl Cinnamal, Butylphenyl Methylpropional, Alpha-Isomethyl Ionone

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

#### 15.2 Chemical safety assessment

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

### **SECTION 16: Other information**

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

Version: 01.3 Revision: 2018-12-09 SDS code: MS1001910

#### Reason for revision:

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

### Classification procedure

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

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

- · H225 Highly flammable liquid and vapour.
- H302 Harmful if swallowed.
- H311 Toxic in contact with skin.
- H314 Causes severe skin burns and eye damage.
- · H319 Causes serious eye irritation.
- H336 May cause drowsiness or dizziness.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.

#### Abbreviations and acronyms:

- · AISE The international Association for Soaps, Detergents and Maintenance Products
- DNEL Derived No Effect Limit
- EUH CLP Specific hazard statement
- PBT Persistent, Bioaccumulative and Toxic
- PNEC Predicted No Effect Concentration
- REACH number REACH registration number, without supplier specific part
- vPvB very Persistent and very Bioaccumulative
- ATE Acute Toxicity Estimate
   LD50 Lethal Dose, 50% / Median Lethal dose
- LC50 Lethal Concentration, 50% / Median Lethal Concentration
- EC50 effective concentration, 50%
- NOEL No observed effect level
- NOAEL No observed adverse effect level
- OECD Organization for Economic Cooperation and Development

**End of Safety Data Sheet**