Safety Data Sheet

According to Regulation (EC) No 1907/2006

Room Care R1-Plus

Revision: 2014-02-06 *Version: 04*

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 Ltd

Contact details
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 Directive 1999/45/EC and corresponding national legislation.

Indication of danger
Xi - Irritant
N - Dangerous for the environment

Risk phrases:
R50 - Very toxic to aquatic organisms.
R36/38 - Irritating to eyes and skin.

2.2 Label elements

Xi - Irritant
N - Dangerous for the environment

Risk phrases:
R50 - Very toxic to aquatic organisms.
R36/38 - Irritating to eyes and skin.

Safety phrases:
S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S37 - Wear suitable gloves.
S61b - Avoid release to the environment. Refer to safety data sheet.

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 (EC) 1272/2008	Notes	Weight percent
citric acid	201-069-1	77-92-9	01-2119457026-42	Xi;R36	Eye Irrit. 2 (H319)		20-30
quaternary ammonium compounds, trimethyltallow alkyl, chlorides	232-447-4	8030-78-2	No data available	Xn;R22 C;R34 N;R50	Skin Corr. 1B (H314) Aquatic Acute 1 (H400) Acute Tox. 4 (H302)		3-10
propane-1,2-diol	200-338-0	57-55-6	01-2119456809-23	-	-		3-10
propan-2-ol	200-661-7	67-63-0	01-2119457558-25	F;R11 Xi;R36 R67	Flam. Liq. 2 (H225) Eye Irrit. 2 (H319) STOT SE 3 (H336)		3-10
sodium xylene sulphonate	215-090-9	1300-72-7	01-2119513350-56	Xi;R36/37/38	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H335)		1-3

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

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation Remove from source of exposure. Get medical attention.
Skin contact: Not required under normal use. Immediately wash off with plenty of water. If irritation develops get medical attention.
Eye contact: Wash off immediately with plenty of water. Get medical attention.
Ingestion: Remove material from mouth. Immediately drink 1-2 glasses of water or milk. Get medical attention.
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: Causes irritation.
Skin contact: Causes irritation.
Eye contact: Causes irritation.
Ingestion: Causes irritation.
Sensitisation: No known effects.

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 gloves.

6.2 Environmental precautions

Do not allow to enter drainage system, surface or ground water. Do not allow to enter the ground/soil. Dilute with plenty of water. Inform responsible authorities in case undiluted product reaches drainage system, surface or ground water or the ground/soil.

6.3 Methods and material for containment and cleaning up

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

6.4 Reference to other sections

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

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Advice on safe handling:
Handle in accordance with good industrial hygiene and safety practice. Do not mix with other products unless advised by Diversey. For advice on general occupational hygiene see subsection 8.2. For environmental exposure controls see subsection 8.2. For incompatible materials see subsection 10.5.

Prevention of fire and explosion:
No special precautions required.

7.2 Conditions for safe storage, including any incompatibilities
Requirements for storage rooms / facilities:
In accordance with local and national regulations.

Combined storage in storage rooms / facilities:
In accordance with local and national regulations. Store away from products containing chlorine-based bleaching agents or sulphites.

Basic storage conditions
Store in original container. Keep container tightly closed. For conditions to avoid see subsection 10.4.

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)
propane-1,2-diol	150 ppm total particulate and vapour 474 mg/m³ total particulate and vapour 10 mg/m³ particulate	450 ppm total particulate and vapour 1422 mg/m³ total particulate and vapour 30 mg/m³ particulate
propan-2-ol	400 ppm 999 mg/m³	500 ppm 1250 mg/m³

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
citric acid	No data available	No data available	No data available	No data available
quaternary ammonium compounds, trimethyltallow alkyl, chlorides	No data available	No data available	No data available	No data available
propane-1,2-diol	No data available	No data available	No data available	No data available
propan-2-ol	No data available	No data available	No data available	26
sodium xylene sulphonate	No data available	No data available	No data available	3.8

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	No data available	No data available
quaternary ammonium compounds, trimethyltallow alkyl, chlorides	No data available	No data available	No data available	No data available
propane-1,2-diol	No data available	No data available	No data available	No data available
propan-2-ol	No data available	No data available	No data available	888
sodium xylene sulphonate	No data available	No data available	No data available	7.6

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	No data available	No data available
quaternary ammonium compounds, trimethyltallow alkyl, chlorides	No data available	No data available	No data available	No data available
propane-1,2-diol	No data available	No data available	No data available	No data available
propan-2-ol	No data available	No data available	No data available	319
sodium xylene sulphonate	No data available	No data available	No data available	3.8

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	No data available	No data available	No data available	No data available
quaternary ammonium compounds, trimethyltallow alkyl, chlorides	No data available	No data available	No data available	No data available
propane-1,2-diol	No data available	No data available	10	168
propan-2-ol	No data available	No data available	No data available	500
sodium xylene sulphonate	No data available	No data available	No data available	53.6

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	No data available	No data available	No data available	No data available
quaternary ammonium compounds, trimethyltallow alkyl, chlorides	No data available	No data available	No data available	No data available
propane-1,2-diol	No data available	No data available	10	50
propan-2-ol	No data available	No data available	No data available	89
sodium xylene sulphonate	No data available	No data available	No data available	13.2

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)
citric acid	0.44	0.044	No data available	> 1000
quaternary ammonium compounds, trimethyltallow alkyl, chlorides	No data available	No data available	No data available	No data available
propane-1,2-diol	260	26	183	20000
propan-2-ol	140.9	140.9	140.9	2251
sodium xylene sulphonate	0.23	No data available	2.3	100

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	No data available
quaternary ammonium compounds, trimethyltallow alkyl, chlorides	No data available	No data available	No data available	No data available
propane-1,2-diol	572	57.2	50	No data available
propan-2-ol	552	552	28	No data available
sodium xylene sulphonate	No data available	No data available	No data available	No data available

8.2 Exposure controls

General health and safety measures

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Take off immediately all contaminated clothing. Wash hands before breaks and at the end of workday. Avoid contact with skin and eyes.

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: 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 are not normally required. However, their use is recommended in those cases where splashes may occur when handling the product.

Hand protection: Chemical-resistant protective gloves (EN 374).
Verify instructions regarding permeability and breakthrough time, as provided by the gloves supplier.
Consider specific local use conditions, such as risk of splashes, cuts, contact time and temperature.

Suggested gloves for prolonged contact:
Material: butyl rubber
Penetration time: >= 480 min
Material thickness: >= 0.7 mm

Suggested gloves for protection against splashes:
Material: nitrile rubber
Penetration time: >= 30 min
Material thickness: >= 0.4 mm

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

Body protection: No special requirements under normal use conditions.

Respiratory protection: No special requirements under normal use conditions.

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

Recommended safety measures for handling the diluted product:

Recommended maximum concentration (%): 10

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

Personal protective equipment .
Eye / face protection: No special requirements under normal use conditions.
Hand protection: Rinse and dry hands after use. For prolonged contact protection for the skin may be necessary.
Body protection: No special requirements under normal use conditions.
Respiratory protection: No special requirements under normal use conditions.

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

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties
Information in this section refers to the product, unless it is specifically stated that substance data is listed

Method / remark

Physical State: Liquid
Colour: Clear, 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)
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	

Method / remark

Flash point (°C): ≈ 51 closed cup
Sustained combustion: This product with a flashpoint between 21°C and 60°C does not support combustion UN Manual of Tests and Criteria, section 32, L.2
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)
propane-1,2-diol	2.6	12.6
propan-2-ol	2	13

Method / remark

Vapour pressure: Not determined

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	No data available		

Method / remark

Vapour density: Not determined
Relative density: 1.14 g/cm³ (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	

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

Method / remark

Autoignition temperature: Not determined
Decomposition temperature: Not determined
Viscosity: ≈ 60 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 UN Manual of Tests and Criteria, section 37
(according to IMDG/ADR regulation): Not corrosive

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

10.6 Hazardous decomposition products
None known under normal storage and use conditions.

SECTION 11: Toxicological information

11.1 Information on toxicological effects
Mixtures
No test data is available on the mixture

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}	200 - 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	Method not given	

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		No data available			
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	Method not given	

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		No data available			
propan-2-ol	LC_{50}	> 25 (vapour)	Rat	OECD 403 (EU B.2)	6
sodium xylene sulphonate	LC_{0}	> 6.41 (mist)	Rat	Method not given	4

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	No data available			
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)	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
citric acid	Severe damage	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)	

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			

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	

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			

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, chlorides		No data available				
propane-1,2-diol		No data available				
propan-2-ol		No data available				
sodium xylene sulphonate	NOAEL	763 - 3534	Rat	OECD 408 (EU B.26)	90	

Sub-chronic dermal 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, chlorides		No data available				
propane-1,2-diol		No data available				
propan-2-ol		No data available				
sodium xylene sulphonate	NOAEL	> 440		OECD 411 (EU B.28)	90	

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, chlorides		No data available				
propane-1,2-diol		No data available				
propan-2-ol		No data available				
sodium xylene sulphonate		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			No data available					

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
Mixture data:
Based on available data, the classification criteria are not met.

Substance data, where relevant and 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

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	OECD 471 (EU B.12/13)	No data available	
sodium xylene sulphonate	No data available		No evidence for mutagenicity, negative test results	OECD 474 (EU B.12)

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		

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
Mixtures
No test 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}	< 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	96

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		No data available			
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	48

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		No data available			
propane-1,2-diol	EC_{50}	24200	Desmodesmus subspicatus	OECD 201	72
propan-2-ol	EC_{50}	> 100	Scenedesmus quadricauda	Method not given	72
sodium xylene sulphonate	EC_{50}	> 230	Not specified	US-EPA 1994	96

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			

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_{0}	> 20000	Pseudomonas putida	Method not given	18 hour(s)
propan-2-ol	EC_{50}	> 1000	Activated sludge	Method not given	
sodium xylene sulphonate	$E_r C_{50}$	> 1000	Activated sludge	OECD 209	3 hour(s)

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
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				

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		No data available				
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				

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				

Terrestrial toxicity

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

Terrestrial toxicity - plants, if available:

Terrestrial toxicity - birds, if available:

Terrestrial toxicity - beneficial insects, if available:

Terrestrial toxicity - soil bacteria, if 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)	Method not given	Readily biodegradable
quaternary ammonium compounds, trimethyltallow alkyl, chlorides					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 301B	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.

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	

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				

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				

12.5 Results of PBT and vPvB assessment

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

12.6 Other adverse effects

No other adverse effects known.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste from residues / unused products: The concentrated contents or contaminated packaging should be disposed of by a certified handler or according to the site permit. Release of waste to sewers is discouraged. The cleaned packaging material is suitable for energy recovery or recycling in line with local legislation.

European Waste Catalogue: 20 01 29* - detergents containing dangerous substances.

Empty packaging

Recommendation: Dispose of observing national or local regulations.

Suitable cleaning agents: Water, if necessary with cleaning agent.

SECTION 14: Transport information

ADR, RID, ADN, IMO/IMDG, ICAO/IATA

14.1 UN number: 3082

14.2 UN proper shipping name:

Environmentally hazardous substance, liquid, n.o.s. (tallowtrimethylammoniumchloride)

14.3 Transport hazard class(es):

Class: 9

Label(s): 9

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: M6
Tunnel restriction code: E
Hazard identification number: 90
IMO/IMDG
EmS: F-A, S-F

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

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

MSDS code: MSDS4774 **Version:** 04 **Revision:** 2014-02-06

Reason for revision:
Overall design adjusted in accordance with Regulation (EC) No 1907/2006, Annex II

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

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

End of Safety Data Sheet