Safety Data Sheet

According to Regulation (EC) No 1907/2006

Room Care R1-plus

Revision: 2017-09-09 **Version:** 01.2

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

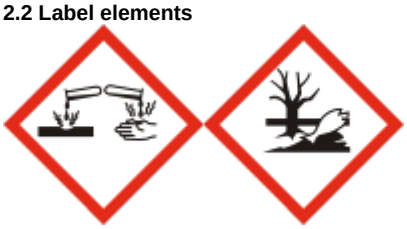
Contact details
Diversey Ltd
Weston Favell Centre, Northampton NN3 8PD, United Kingdom
Tel: 01604 405311, Fax: 01604 406809
Regulatory Email: customerservice.uk@diversey.com

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)
Aquatic Acute 1 (H400)
Aquatic Chronic 1 (H410)
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
quaternary ammonium compounds, trimethyltallow alkyl, chlorides	232-447-4	8030-78-2	No data available	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
dimethyl tallow alkyl amines hydrochlorides	-	-	No data available	Skin Corr. 1B (H314) Acute Tox. 4 (H302) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)		0.1-1
2-tert-butylcyclohexyl acetate	201-828-7	88-41-5	No data available	Aquatic Chronic 2 (H411)		0.1-1
sodium xylene sulphonate	215-090-9	1300-72-7	01-2119513350-56	Eye Irrit. 2 (H319)		0.01-0.1

* 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 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

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. 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)
propane-1,2-diol	150 ppm total particulates and vapour 474 mg/m³ total particulates and vapour 10 mg/m³ particulates	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
quaternary ammonium compounds, trimethyltallow alkyl, chlorides	-	-	-	2.83
propane-1,2-diol	-	-	-	-
propan-2-ol	-	-	-	26
dimethyl tallow alkyl amines hydrochlorides	No data available	No data available	No data available	No data available
2-tert-butylcyclohexyl acetate	No data available	No data available	No data available	No data available
sodium xylene sulphonate	-	-	-	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)
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
dimethyl tallow alkyl amines hydrochlorides	No data available	No data available	No data available	No data available
2-tert-butylcyclohexyl acetate	No data available	No data available	No data available	No data available
sodium xylene sulphonate	-	-	-	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)
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
dimethyl tallow alkyl amines hydrochlorides	No data available	No data available	No data available	No data available
2-tert-butylcyclohexyl acetate	No data available	No data available	No data available	No data available
sodium xylene sulphonate	-	-	-	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
quaternary ammonium compounds, trimethyltallow alkyl, chlorides	-	-	-	3.32
propane-1,2-diol	-	-	10	168
propan-2-ol	-	-	-	500
dimethyl tallow alkyl amines hydrochlorides	No data available	No data available	No data available	No data available
2-tert-butylcyclohexyl acetate	No data available	No data available	No data available	No data available
sodium xylene sulphonate	-	-	-	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
quaternary ammonium compounds, trimethyltallow alkyl, chlorides	-	-	-	0.98
propane-1,2-diol	-	-	10	50
propan-2-ol	-	-	-	89
dimethyl tallow alkyl amines hydrochlorides	No data available	No data available	No data available	No data available
2-tert-butylcyclohexyl acetate	No data available	No data available	No data available	No data available
sodium xylene sulphonate	-	-	-	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)
quaternary ammonium compounds, trimethyltallow alkyl, chlorides	0.00068	0.000068	0.00013	1.1
propane-1,2-diol	260	26	183	20000
propan-2-ol	140.9	140.9	140.9	2251
dimethyl tallow alkyl amines hydrochlorides	No data available	No data available	No data available	No data available
2-tert-butylcyclohexyl acetate	No data available	No data available	No data available	No data available
sodium xylene sulphonate	0.23	-	2.3	100

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m³)
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	-
dimethyl tallow alkyl amines hydrochlorides	No data available	No data available	No data available	No data available
2-tert-butylcyclohexyl acetate	No data available	No data available	No data available	No data available
sodium xylene sulphonate	-	-	-	-

8.2 Exposure controls

The following information applies for the uses indicated in subsection 1.2 of the Safety Data Sheet.
If available, please refer to the product information sheet for application and handling instructions.
Normal use conditions are assumed for this section.

Recommended safety measures for handling the undiluted product:
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.

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: Wear chemical-resistant clothing and boots in case direct dermal exposure and/or splashes may occur (EN 14605).

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: Provide a good standard of general ventilation.
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: 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: 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)	
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)
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
dimethyl tallow alkyl amines hydrochlorides	No data available		
2-tert-butylcyclohexyl acetate	No data available		
sodium xylene sulphonate	> 100	Method not given	

	Method / remark
Flash point (°C): ≈ 51	closed cup
Sustained combustion: The product does not sustain combustion *(UN Manual of Tests and Criteria, section 32, L.2)*	Weight of evidence
Evaporation rate: Not determined	Not relevant to classification of this product
Flammability (solid, gas): Not applicable to liquids	
Upper/lower flammability limit (%): Not determined	See substance data

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	See substance data

Substance data, vapour pressure

Ingredient(s)	Value (Pa)	Method	Temperature (°C)

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
dimethyl tallow alkyl amines hydrochlorides	No data available		
2-tert-butylcyclohexyl acetate	No data available		
sodium xylene sulphonate	No data available		

Method / remark

Vapour density: Not determined — Not applicable, no vapour pressure data available
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)
quaternary ammonium compounds, trimethyltallow alkyl, chlorides	No data available		
propane-1,2-diol	Soluble	Method not given	
propan-2-ol	Soluble	Method not given	
dimethyl tallow alkyl amines hydrochlorides	No data available		
2-tert-butylcyclohexyl acetate	No data available		
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 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 — Not relevant to classification of this product
Corrosion to metals: Corrosive — 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

Substance data, where relevant and available, are listed below:.

Acute toxicity
Acute oral toxicity

Ingredient(s)	Endpoint	Value	Species	Method	Exposure

		(mg/kg)			time (h)
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	
dimethyl tallow alkyl amines hydrochlorides		No data available			
2-tert-butylcyclohexyl acetate		No data available			
sodium xylene sulphonate	LD_{50}	> 7200	Rat	Method not given	

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
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	
dimethyl tallow alkyl amines hydrochlorides		No data available			
2-tert-butylcyclohexyl acetate		No data available			
sodium xylene sulphonate	LD_{50}	> 2000	Rabbit	Method not given	

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
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
dimethyl tallow alkyl amines hydrochlorides		No data available			
2-tert-butylcyclohexyl acetate		No data available			
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
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)	
dimethyl tallow alkyl amines hydrochlorides	No data available			
2-tert-butylcyclohexyl acetate	No data available			
sodium xylene sulphonate	Mild irritant	Rabbit	OECD 404 (EU B.4)	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
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)	
dimethyl tallow alkyl amines hydrochlorides	No data available			
2-tert-butylcyclohexyl acetate	No data available			
sodium xylene sulphonate	Irritant	Rabbit	OECD 405 (EU B.5)	

Respiratory tract irritation and corrosivity

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

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
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	
dimethyl tallow alkyl amines hydrochlorides	No data available			
2-tert-butylcyclohexyl acetate	No data available			
sodium xylene sulphonate	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
quaternary ammonium compounds, trimethyltallow alkyl, chlorides	No data available			
propane-1,2-diol	No data available			
propan-2-ol	No data available			
dimethyl tallow alkyl amines hydrochlorides	No data available			
2-tert-butylcyclohexyl acetate	No data available			
sodium xylene sulphonate	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)
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	
dimethyl tallow alkyl amines hydrochlorides	No data available		No data available	
2-tert-butylcyclohexyl acetate	No data available		No data available	
sodium xylene sulphonate	No evidence for mutagenicity, negative test results	OECD 473	No evidence for mutagenicity, negative test results	OECD 474 (EU B.12)

Carcinogenicity

Ingredient(s)	Effect
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
dimethyl tallow alkyl amines hydrochlorides	No data available
2-tert-butylcyclohexyl acetate	No data available
sodium xylene sulphonate	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
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				
dimethyl tallow alkyl amines hydrochlorides			No data available				
2-tert-butylcyclohexyl acetate			No data available				
sodium xylene sulphonate	NOAEL	Teratogenic effects	> 936	Rat	Non guideline test		

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
quaternary ammonium compounds, trimethyltallow alkyl, chlorides		No data available				
propane-1,2-diol		No data available				
propan-2-ol		No data available				
dimethyl tallow alkyl amines hydrochlorides		No data available				
2-tert-butylcyclohexyl acetate		No data available				
sodium xylene sulphonate	NOAEL	763 - 3534	Rat	OECD 408 (EU B.26)	90	

Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Specific effects and organs

		(mg/kg bw/d)			time (days)	affected
quaternary ammonium compounds, trimethyltallow alkyl, chlorides		No data available				
propane-1,2-diol		No data available				
propan-2-ol		No data available				
dimethyl tallow alkyl amines hydrochlorides		No data available				
2-tert-butylcyclohexyl acetate		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
quaternary ammonium compounds, trimethyltallow alkyl, chlorides		No data available				
propane-1,2-diol		No data available				
propan-2-ol		No data available				
dimethyl tallow alkyl amines hydrochlorides		No data available				
2-tert-butylcyclohexyl acetate		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
quaternary ammonium compounds, trimethyltallow alkyl, chlorides			No data available					
propane-1,2-diol			No data available					
propan-2-ol			No data available					
dimethyl tallow alkyl amines hydrochlorides			No data available					
2-tert-butylcyclohexyl acetate			No data available					
sodium xylene sulphonate	Oral		No data available	Rat	OECD 453 (EU B.33)	24 month(s)	No adverse effects observed	

STOT-single exposure

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

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
quaternary ammonium compounds, trimethyltallow alkyl, chlorides	No data available
propane-1,2-diol	No data available
propan-2-ol	No data available
dimethyl tallow alkyl amines hydrochlorides	No data available
2-tert-butylcyclohexyl acetate	No data available
sodium xylene sulphonate	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)
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
dimethyl tallow alkyl amines hydrochlorides		No data available			
2-tert-butylcyclohexyl acetate		No data available			
sodium xylene sulphonate	LC_{50}	> 1000	*Fish*	EPA-OPPTS 850.1075	96

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
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
dimethyl tallow alkyl amines hydrochlorides		No data available			
2-tert-butylcyclohexyl acetate		No data available			
sodium xylene sulphonate	EC_{50}	> 1000	*Daphnia*	EPA-OPPTS 850.1010	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
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
dimethyl tallow alkyl amines hydrochlorides		No data available			
2-tert-butylcyclohexyl acetate		No data available			
sodium xylene sulphonate	EC_{50}	> 230	*Not specified*	EPA OPPTS 850.5400	96

Aquatic short-term toxicity - marine species

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

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
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 - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
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 - beneficial insects, if available:

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

12.2 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
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
dimethyl tallow alkyl amines hydrochlorides					No data available
2-tert-butylcyclohexyl acetate					No data available
sodium xylene sulphonate			99.8 % in 28 day(s)	OECD 301F	Readily biodegradable

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
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	
dimethyl tallow alkyl amines hydrochlorides	No data available			
2-tert-butylcyclohexyl acetate	No data available			
sodium xylene sulphonate	-3.12	Method not given	No bioaccumulation expected	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
quaternary ammonium compounds, trimethyltallow alkyl, chlorides	No data available				
propane-1,2-diol	No data available				
propan-2-ol	No data available				
dimethyl tallow alkyl	No data available				

amines hydrochlorides					
2-tert-butylcyclohexyl acetate	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
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
dimethyl tallow alkyl amines hydrochlorides	No data available				
2-tert-butylcyclohexyl acetate	No data available				
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.

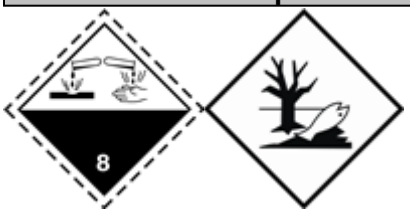
European Waste Catalogue: 20 01 14* - acids.

Empty packaging

Recommendation: Dispose of observing national or local regulations.

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

SECTION 14: Transport information



Land transport (ADR/RID), Sea transport (IMDG), Air transport (ICAO-TI / IATA-DGR)

14.1 UN number: 3265

14.2 UN proper shipping name:

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

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

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

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

SDS code: MS1001910 **Version:** 01.2 **Revision:** 2017-09-09

Reason for revision:
This data sheet contains changes from the previous version in section(s):, 2, 3, 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.
• 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.
• H411 - 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

End of Safety Data Sheet