Room Care R1-plus

Revision: 2015-05-29 *Version: 01.0*

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
Tel: 01604 405311, Fax: 01604 406809
Regulatory Email: MSDSinfoUK@sealedair.com

1.4 Emergency telephone number
For medical or environmental emergency only:
call 0800 052 0185

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
The product has been classified and labelled in accordance with Regulation (EC) No 1272/2008.

Skin Corr. 1B (H314)
Aquatic Acute 1 (H400)
Aquatic Chronic 1 (H410)
Met. Corr. 1 (H290)

Classification 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

Signal word: Danger.

Contains quaternary ammonium compounds, trimethyltallow alkyl, chlorides (Tallowtrimonium Chloride). EUH208:
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one (Tetramethyl Acetyloctahydronaphtalenes)

Hazard statements:
H314 - Causes severe skin burns and eye damage.

EUH208 - May produce an allergic reaction.
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	Classification (1999/45/EC)	Notes	Weight percent
citric acid monohydrate	201-069-1	5949-29-1	01-2119457026-42	Eye Irrit. 2 (H319)	Xi;R36		30-50
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)	Xn;R22 C;R34 N;R50		3-10
propane-1,2-diol	200-338-0	57-55-6	01-2119456809-23	Not classified	-		3-10
propan-2-ol	200-661-7	67-63-0	01-2119457558-25	Flam. Liq. 2 (H225) STOT SE 3 (H336) Eye Irrit. 2 (H319)	F;R11 Xi;R36 R67		3-10
sodium xylene sulphonate	215-090-9	1300-72-7	01-2119513350-56	Eye Irrit. 2 (H319)	Xi;R36/37/38		1-3
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)etha n-1-one	259-174-3	54464-57-2	No data available	Skin Irrit. 2 (H315) Skin Sens. 1 (H317) Aquatic Chronic 2 (H411)	N;R51/53		0.1-1
2-tert-butylcyclohexyl acetate	201-828-7	88-41-5	No data available	Aquatic Chronic 2 (H411)	N;R51/53		0.1-1
tridec-2-enenitrile	245-142-6	22629-49-8	No data available	Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	N;R50/53		< 0.01

* 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 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 Sealed Air. Wash hands before breaks and at the end of workday. Wash face, hands and any exposed skin thoroughly after handling. Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. Use personal protective equipment as required. Avoid contact with skin and eyes. Use only with adequate ventilation.

7.2 Conditions for safe storage, including any incompatibilities
Store in accordance with local and national regulations. Keep only in original container. Store in a closed container.
For conditions to avoid see subsection 10.4. For incompatible materials see subsection 10.5.

7.3 Specific end use(s)
No specific advice for end use available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
Workplace exposure limits

Air limit values, if available:

Ingredient(s)	UK - Long term value(s)	UK - Short term value(s)
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
citric acid monohydrate	-	-	-	-
quaternary ammonium compounds, trimethyltallow alkyl, chlorides	No data available	No data available	No data available	No data available

propane-1,2-diol	-	-	-	-
propan-2-ol	-	-	-	26
sodium xylene sulphonate	-	-	-	3.8
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	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
tridec-2-enenitrile	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 monohydrate	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	-
propan-2-ol	No data available	-	No data available	888
sodium xylene sulphonate	No data available	-	No data available	7.6
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	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
tridec-2-enenitrile	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 monohydrate	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	-
propan-2-ol	No data available	-	No data available	319
sodium xylene sulphonate	No data available	-	No data available	3.8
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	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
tridec-2-enenitrile	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 monohydrate	-	-	-	-
quaternary ammonium compounds, trimethyltallow alkyl, chlorides	No data available	No data available	No data available	No data available
propane-1,2-diol	-	-	10	168
propan-2-ol	-	-	-	500
sodium xylene sulphonate	-	-	-	53.6
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	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
tridec-2-enenitrile	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 monohydrate	-	-	-	-
quaternary ammonium compounds, trimethyltallow alkyl, chlorides	No data available	No data available	No data available	No data available
propane-1,2-diol	-	-	10	50
propan-2-ol	-	-	-	89
sodium xylene sulphonate	-	-	-	13.2
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	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
tridec-2-enenitrile	No data available	No data available	No data available	No data available

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 monohydrate	0.44	0.044	-	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	-	2.3	100
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	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
tridec-2-enenitrile	No data available	No data available	No data available	No data available

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater	Sediment, marine	Soil (mg/kg)	Air (mg/m³)

	(mg/kg)	(mg/kg)		
citric acid monohydrate	34.6	3.46	33.1	-
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	-
propan-2-ol	552	552	28	-
sodium xylene sulphonate	-	-	-	-
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	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
tridec-2-enenitrile	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.
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.
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: Use only in well ventilated areas.
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
Initial boiling point and boiling range (°C): Not determined

Substance data, boiling point

Ingredient(s)	Value (°C)	Method	Atmospheric pressure (hPa)
citric acid monohydrate	175	Method not given	1013
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	
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	No data available		
2-tert-butylcyclohexyl acetate	No data available		
tridec-2-enenitrile	No data available		

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 — Weight of evidence
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 monohydrate	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		
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	No data available		
2-tert-butylcyclohexyl acetate	No data available		
tridec-2-enenitrile	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 monohydrate	880	Method not given	20
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	
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	No data available		
2-tert-butylcyclohexyl acetate	No data available		
tridec-2-enenitrile	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 determined
Viscosity: ≈ 60 mPa.s (20 °C)
Explosive properties: Not explosive. Vapours may form explosive mixtures with air.
Oxidising properties: Not oxidising

9.2 Other information

Surface tension (N/m): Not determined
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 (mg/kg)	Species	Method	Exposure time (h)
citric acid monohydrate	LD_{50}	5400	Mouse	OECD 401 (EU B.1)	-
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	-
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one		No data available			
2-tert-butylcyclohexyl acetate		No data available			
tridec-2-enenitrile		No data available			

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
citric acid monohydrate	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	-
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one		No data available			
2-tert-butylcyclohexyl acetate		No data available			
tridec-2-enenitrile		No data available			

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
citric acid monohydrate		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
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one		No data available			
2-tert-butylcyclohexyl acetate		No data available			
tridec-2-enenitrile		No data available			

Irritation and corrosivity

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
citric acid monohydrate	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)	
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	No data available			
2-tert-butylcyclohexyl acetate	No data available			
tridec-2-enenitrile	No data available			

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
citric acid monohydrate	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)	
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	No data available			
2-tert-butylcyclohexyl acetate	No data available			
tridec-2-enenitrile	No data available			

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
citric acid monohydrate	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			
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	No data available			
2-tert-butylcyclohexyl acetate	No data available			
tridec-2-enenitrile	No data available			

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
citric acid monohydrate	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	-
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	No data available			
2-tert-butylcyclohexyl acetate	No data available			
tridec-2-enenitrile	No data available			

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
citric acid monohydrate	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			-
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	No data available			
2-tert-butylcyclohexyl acetate	No data available			
tridec-2-enenitrile	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 monohydrate	No evidence for mutagenicity, negative test results	Method not given	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)
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	No data available		No data available	
2-tert-butylcyclohexyl acetate	No data available		No data available	
tridec-2-enenitrile	No data available		No data available	

Carcinogenicity

Ingredient(s)	Effect
citric acid monohydrate	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
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	No data available
2-tert-butylcyclohexyl acetate	No data available
tridec-2-enenitrile	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 monohydrate			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		
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one			No data available				
2-tert-butylcyclohexyl acetate			No data available				
tridec-2-enenitrile			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 monohydrate	NOAEL	4000	Rat	Method not given	5	
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	
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one		No data available				
2-tert-butylcyclohexyl acetate		No data available				
tridec-2-enenitrile		No data available				

Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
citric acid monohydrate		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 B.28)	90	
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one		No data available				
2-tert-butylcyclohexyl acetate		No data available				
tridec-2-enenitrile		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 monohydrate		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			-	
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one		No data available				
2-tert-butylcyclohexyl acetate		No data available				
tridec-2-enenitrile		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 monohydrate	Oral		2000	Rat	Method not given	90 day(s)	No 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					
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one			No data available					
2-tert-butylcyclohexyl acetate			No data available					
tridec-2-enenitrile			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
citric acid monohydrate	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
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	No data available
2-tert-butylcyclohexyl acetate	No data available
tridec-2-enenitrile	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
citric acid monohydrate	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
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	No data available
2-tert-butylcyclohexyl acetate	No data available
tridec-2-enenitrile	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 monohydrate	LC_{50}	440	*Leuciscus idus*	OECD 203	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
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one		No data available			
2-tert-butylcyclohexyl acetate		No data available			
tridec-2-enenitrile		No data available			

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
citric acid monohydrate	LC_{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
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one		No data available			
2-tert-butylcyclohexyl acetate		No data available			
tridec-2-enenitrile		No data available			

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
citric acid monohydrate	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
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one		No data available			
2-tert-butylcyclohexyl acetate		No data available			
tridec-2-enenitrile		No data available			

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
citric acid monohydrate		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			
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one		No data available			
2-tert-butylcyclohexyl acetate		No data available			
tridec-2-enenitrile		No data available			

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
citric acid monohydrate	EC_0	> 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)
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one		No data available			
2-tert-butylcyclohexyl acetate		No data available			
tridec-2-enenitrile		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 monohydrate		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				
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one		No data available				
2-tert-butylcyclohexyl acetate		No data available				
tridec-2-enenitrile		No data available				

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
citric acid monohydrate		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				
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one		No data available				
2-tert-butylcyclohexyl acetate		No data available				
tridec-2-enenitrile		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 monohydrate		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			-	
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-napht		No data				

hyl)ethan-1-one		available				
2-tert-butylcyclohexyl acetate		No data available				
tridec-2-enenitrile		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
citric acid monohydrate		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 - plants, if available:

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

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

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

12.2 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 monohydrate		Method not given	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
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one					No data available
2-tert-butylcyclohexyl acetate					No data available
tridec-2-enenitrile					No data available

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 monohydrate	-1.72	Method not given	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	
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	No data available			
2-tert-butylcyclohexyl acetate	No data available			
tridec-2-enenitrile	No data available			

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
citric acid monohydrate	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				
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	No data available				
2-tert-butylcyclohexyl acetate	No data available				
tridec-2-enenitrile	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 monohydrate	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				
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	No data available				

2-tert-butylcyclohexyl acetate	No data available				
tridec-2-enenitrile	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

ADR, RID, ADN, IMO/IMDG, ICAO/IATA
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 73/78 and the IBC Code: The product is not transported in bulk tankers.

Other relevant information:
ADR
Classification code: C3
Tunnel restriction code: E
Hazard identification number: 80
IMO/IMDG
EmS: F-A, S-B

The product has been classified, labelled and packaged in accordance with the requirements of ADR and the provisions of the IMDG Code. Transport regulations include special provisions for certain classes of dangerous goods packed in limited quantities.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

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

Ingredients according to EC Detergents Regulation 648/2004
cationic surfactants 5 - 15%
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

SDS code: MS1001910 **Version:** 01.0 **Revision:** 2015-05-29

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

Full text of the R, H and EUH phrases mentioned in section 3:
- H225 - Highly flammable liquid and vapour.
- H302 - Harmful if swallowed.
- H314 - Causes severe skin burns and eye damage.
- H315 - Causes skin irritation.
- H317 - May cause an allergic skin reaction.
- 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.
- R11 - Highly flammable.
- R22 - Harmful if swallowed.
- R34 - Causes burns.
- R36 - Irritating to eyes.
- R38 - Irritating to skin.
- R43 - May cause sensitisation by skin contact.
- R50 - Very toxic to aquatic organisms.
- R67 - Vapours may cause drowsiness and dizziness.
- R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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