Room Care R5.1-Plus

Revision: 2024-08-02 **Version:** 03.2

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

1.1 Product identifier
Trade name: Room Care R5.1-Plus

UFI: 4JH3-M09K-E00D-R013

1.2 Relevant identified uses of the substance or mixture and uses advised against
Product use: Odor Control - Instant action.
For professional use only.

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

SWED - Sector-specific worker exposure description :
AISE_SWED_PW_8a_1
AISE_SWED_PW_11_1
AISE_SWED_PW_19_1

1.3 Details of the supplier of the safety data sheet
Diversey Europe Operations BV, De Corridor 4, 3621ZB Breukelen [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: customerservice.uk@solenis.com

1.4 Emergency telephone number
Seek medical advice (show the label or safety data sheet where possible)
For medical or environmental emergency only:
call 0800 052 0185

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Eye irritation, Category 2 (H319)
Skin sensitisation, Category 1 (H317)
Chronic aquatic toxicity, Category 3 (H412)

2.2 Label elements

Signal word: Warning.

Contains alpha-hexylcinnamaldehyde (Hexyl Cinnamal), benzyl salicylate (Benzyl Salicylate), [3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one (Acetyl Cedrene), 4-tert-butylcyclohexyl acetate (4-tert-butylcyclohexyl acetate), (Z)-3-hexenyl salicylate (Cis-3-Hexenyl Salicylate), d-limonene (Limonene)

Hazard statements:
H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation.
H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements:
P280 - Wear protective gloves.

2.3 Other hazards
No other hazards known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Ingredient(s)	EC number	CAS number	REACH number	Classification	Notes	Weight percent
alkyl alcohol ethoxylate	[4]	68439-46-3	[4]	Acute toxicity - Oral, Category 4 (H302) Serious eye damage, Category 1 (H318) Chronic aquatic toxicity, Category 3 (H412)		10-20
Propan-2-ol	200-661-7	67-63-0	01-2119457558-25	Flammable liquids, Category 2 (H225) Specific target organ toxicity - Single exposure, Category 3 (H336) Eye irritation, Category 2 (H319)		3-10
alpha-hexylcinnamaldehyde	202-983-3	101-86-0	01-2119533092-50	Skin sensitisation, Sub-category 1B (H317) Acute aquatic toxicity, Category 1 M=1 (H400) Chronic aquatic toxicity, Category 2 (H411)		1-3
benzyl salicylate	204-262-9	118-58-1	01-2119969442-31	Eye irritation, Category 2 (H319) Skin sensitisation, Sub-category 1B (H317) Chronic aquatic toxicity, Category 3 (H412)		1-3
pentyl salicylate	218-080-2	2050-08-0	01-2119969444-27	Acute toxicity - Oral, Category 4 (H302) Acute aquatic toxicity, Category 1 M=1 (H400) Chronic aquatic toxicity, Category 1 M=1 (H410)		0.1-1
4-tert-butylcyclohexyl acetate	250-954-9	32210-23-4	01-2119976286-24	Skin sensitisation, Sub-category 1B (H317) Chronic aquatic toxicity, Category 2 (H411)		0.1-1
[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one	251-020-3	32388-55-9	01-2119969651-28	Skin sensitisation, Sub-category 1B (H317) Acute aquatic toxicity, Category 1 M=1 (H400) Chronic aquatic toxicity, Category 1 M=1 (H410)		0.1-1
(Z)-3-hexenyl salicylate	265-745-8	65405-77-8	01-2119987320-37	Skin sensitisation, Sub-category 1B (H317) Acute aquatic toxicity, Category 1 M=1 (H400) Chronic aquatic toxicity, Category 1 M=1 (H410)		0.1-1
d-limonene	227-813-5	5989-27-5	01-2119529223-47	Flammable liquids, Category 3 (H226) Aspiration toxicity, Category 1 (H304) Skin irritation, Category 2 (H315) Skin sensitisation, Sub-category 1B (H317) Acute aquatic toxicity, Category 1 M=1 (H400) Chronic aquatic toxicity, Category 1 M=1 (H410)		0.1-1
7-hydroxycitronellal	203-518-7	107-75-5	01-2119973482-31	Eye irritation, Category 2 (H319) Skin sensitisation, Sub-category 1B (H317)		0.1-1

Workplace exposure limit(s), if available, are listed in subsection 8.1.
ATE, if available, are listed in section 11.
[4] Exempted: polymer. See Article 2(9) of Regulation (EC) No 1907/2006.
For the full text of the H and EUH phrases mentioned in this Section, see Section 16..

SECTION 4: First aid measures

4.1 Description of first aid measures

General Information: Symptoms of intoxication may even occur after several hours. It is recommended to continue medical observation for at least 48 hours after the incident.

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

Skin contact: Wash skin with plenty of lukewarm, gently flowing water. If skin irritation occurs: Get medical advice or attention.

Eye contact: Hold eyelids apart and flush eyes with plenty of lukewarm water for at least 15 minutes. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation occurs and persists, get medical attention.

Ingestion: Rinse mouth. Immediately drink 1 glass of water. Never give anything by mouth to an unconscious person. Get medical attention or advice if you feel unwell.

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: May cause an allergic skin reaction.

Eye contact: Causes severe irritation.

Ingestion: No known effects or symptoms in normal use.

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
Dilute with plenty of water. Do not allow to enter drainage system, surface or ground water. Do not allow to enter the ground/soil. 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
Dyke to collect large liquid spills. Absorb with liquid-binding material (sand, diatomite, universal binders). Do not place spilled materials back into the original container. Collect in closed and suitable containers for disposal.

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. Take off contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Avoid contact with skin and eyes. Do not breathe spray. Use only with adequate ventilation. See chapter 8.2, Exposure controls / Personal protection.

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

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

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
Workplace exposure limits

Air limit values, if available:

Ingredient(s)	UK - Long term value(s)	UK - Short term value(s)
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/DMEL oral exposure - Consumer (mg/kg bw)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
alkyl alcohol ethoxylate	-	-	-	-
Propan-2-ol	-	-	-	26
alpha-hexylcinnamaldehyde	No data available	No data available	No data available	No data available
benzyl salicylate	No data available	No data available	No data available	No data available
pentyl salicylate	No data available	No data available	No data available	No data available

4-tert-butylcyclohexyl acetate	No data available	No data available	No data available	No data available
[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one	No data available	No data available	No data available	No data available
(Z)-3-hexenyl salicylate	No data available	No data available	No data available	No data available
d-limonene	-	-	-	4.76
7-hydroxycitronellal	No data available	No data available	No data available	No data available

DNEL/DMEL 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)
alkyl alcohol ethoxylate	-	-	-	-
Propan-2-ol	-	-	-	888
alpha-hexylcinnamaldehyde	No data available	No data available	No data available	No data available
benzyl salicylate	No data available	No data available	No data available	No data available
pentyl salicylate	No data available	No data available	No data available	No data available
4-tert-butylcyclohexyl acetate	No data available	No data available	No data available	No data available
[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one	No data available	No data available	No data available	No data available
(Z)-3-hexenyl salicylate	No data available	No data available	No data available	No data available
d-limonene	0.222 mg/cm² skin	-	No data available	-
7-hydroxycitronellal	No data available	No data available	No data available	No data available

DNEL/DMEL 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)
alkyl alcohol ethoxylate	-	-	-	-
Propan-2-ol	-	-	-	319
alpha-hexylcinnamaldehyde	No data available	No data available	No data available	No data available
benzyl salicylate	No data available	No data available	No data available	No data available
pentyl salicylate	No data available	No data available	No data available	No data available
4-tert-butylcyclohexyl acetate	No data available	No data available	No data available	No data available
[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one	No data available	No data available	No data available	No data available
(Z)-3-hexenyl salicylate	No data available	No data available	No data available	No data available
d-limonene	0.111 mg/cm² skin	-	No data available	-
7-hydroxycitronellal	No data available	No data available	No data available	No data available

DNEL/DMEL inhalatory exposure - Worker (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
alkyl alcohol ethoxylate	-	-	-	-
Propan-2-ol	-	-	-	500
alpha-hexylcinnamaldehyde	No data available	No data available	No data available	No data available
benzyl salicylate	No data available	No data available	No data available	No data available
pentyl salicylate	No data available	No data available	No data available	No data available
4-tert-butylcyclohexyl acetate	No data available	No data available	No data available	No data available
[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one	No data available	No data available	No data available	No data available
(Z)-3-hexenyl salicylate	No data available	No data available	No data available	No data available
d-limonene	-	-	-	33.3
7-hydroxycitronellal	No data available	No data available	No data available	No data available

DNEL/DMEL inhalatory exposure - Consumer (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
alkyl alcohol ethoxylate	-	-	-	-
Propan-2-ol	-	-	-	89
alpha-hexylcinnamaldehyde	No data available	No data available	No data available	No data available
benzyl salicylate	No data available	No data available	No data available	No data available
pentyl salicylate	No data available	No data available	No data available	No data available
4-tert-butylcyclohexyl acetate	No data available	No data available	No data available	No data available
[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one	No data available	No data available	No data available	No data available
(Z)-3-hexenyl salicylate	No data available	No data available	No data available	No data available
d-limonene	-	-	-	8.33
7-hydroxycitronellal	No data available	No data available	No data available	No data available

Environmental exposure

Environmental exposure - PNEC

Ingredient(s)	Surface water, fresh	Surface water, marine	Intermittent (mg/l)	Sewage treatment

	(mg/l)	(mg/l)		plant (mg/l)
alkyl alcohol ethoxylate	-	-	-	-
Propan-2-ol	140.9	140.9	140.9	2251
alpha-hexylcinnamaldehyde	No data available	No data available	No data available	No data available
benzyl salicylate	No data available	No data available	No data available	No data available
pentyl salicylate	No data available	No data available	No data available	No data available
4-tert-butylcyclohexyl acetate	No data available	No data available	No data available	No data available
[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one	No data available	No data available	No data available	No data available
(Z)-3-hexenyl salicylate	No data available	No data available	No data available	No data available
d-limonene	0.014	0.0014	-	1.8
7-hydroxycitronellal	No data available	No data available	No data available	No data available

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m³)
alkyl alcohol ethoxylate	-	-	-	-
Propan-2-ol	552	552	28	-
alpha-hexylcinnamaldehyde	No data available	No data available	No data available	No data available
benzyl salicylate	No data available	No data available	No data available	No data available
pentyl salicylate	No data available	No data available	No data available	No data available
4-tert-butylcyclohexyl acetate	No data available	No data available	No data available	No data available
[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one	No data available	No data available	No data available	No data available
(Z)-3-hexenyl salicylate	No data available	No data available	No data available	No data available
d-limonene	3.85	0.385	0.763	-
7-hydroxycitronellal	No data available	No data available	No data available	No data available

8.2 Exposure controls

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

Recommended safety measures for handling the 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.

REACH use scenarios considered for the undiluted product:

	SWED - Sector-specific worker exposure description	LCS	PROC	Duration (min)	ERC
Manual transfer and dilution	AISE_SWED_PW_8a_1	PW	PROC 8a	60	ERC8a

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 (EN 16321 / EN 166).
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: No special requirements under normal use conditions.

Recommended safety measures for handling the diluted product:

Recommended maximum concentration (% w/w): 10

Appropriate engineering controls: Provide a good standard of general ventilation.
Appropriate organisational controls: Avoid direct contact and/or splashes where possible. Train personnel.

REACH use scenarios considered for the diluted product:

	SWED	LCS	PROC	Duration (min)	ERC
Spray application	AISE_SWED_PW_11_1	PW	PROC 11	60	ERC8a
Manual application	AISE_SWED_PW_19_1	PW	PROC 19	480	ERC8a

Personal protective equipment

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

Hand protection: No special requirements under normal use conditions.

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. Trigger spray bottle application: No special requirements under normal use conditions. Apply technical measures to comply with the occupational exposure limits, if available.

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 , Light , from Colourless to Yellow	
Odour: Product specific	
Odour threshold: Not applicable	
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)
alkyl alcohol ethoxylate	> 232		
Propan-2-ol	82	Method not given	1013
alpha-hexylcinnamaldehyde	No data available		
benzyl salicylate	No data available		
pentyl salicylate	No data available		
4-tert-butylcyclohexyl acetate	No data available		
[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one	No data available		
(Z)-3-hexenyl salicylate	No data available		
d-limonene	175-178	Weight of evidence	1013
7-hydroxycitronellal	No data available		

	Method / remark
Flammability (solid, gas): Not applicable to liquids	
Flammability (liquid): Not flammable.	
Flash point (°C): ≈ 37 °C	closed cup
Sustained combustion: The product does not sustain combustion *(UN Manual of Tests and Criteria, section 32, L.2)*	Weight of evidence
Lower and upper explosion limit/flammability limit (%): Not determined	See substance data

Substance data, flammability or explosive limits, if available:

Ingredient(s)	Lower limit (% vol)	Upper limit (% vol)
Propan-2-ol	2	13
d-limonene	0.7	6.1

	Method / remark
Autoignition temperature: Not determined	
Decomposition temperature: Not applicable.	
pH: ≈ 7 (neat)	ISO 4316
Dilution pH: ≈ 8 (10 %)	ISO 4316
Kinematic viscosity: Not determined	DM-006 Viscosity - Standard
Solubility in / Miscibility with water: Fully miscible	

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
alkyl alcohol ethoxylate	Soluble	Method not given	

Propan-2-ol	Soluble	Method not given	
alpha-hexylcinnamaldehyde	No data available		
benzyl salicylate	No data available		
pentyl salicylate	No data available		
4-tert-butylcyclohexyl acetate	No data available		
[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one	No data available		
(Z)-3-hexenyl salicylate	No data available		
d-limonene	Insoluble	Method not given	20
7-hydroxycitronellal	No data available		

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

Vapour pressure: Not determined

Method / remark
See substance data

Substance data, vapour pressure

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
alkyl alcohol ethoxylate	10		37
Propan-2-ol	4200	Method not given	20
alpha-hexylcinnamaldehyde	No data available		
benzyl salicylate	No data available		
pentyl salicylate	No data available		
4-tert-butylcyclohexyl acetate	No data available		
[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one	No data available		
(Z)-3-hexenyl salicylate	No data available		
d-limonene	190-230	Method not given	20
7-hydroxycitronellal	No data available		

Method / remark

Relative density: ≈ 0.99 (20 °C) — OECD 109 (EU A.3)
Relative vapour density: No data available. — Not relevant to classification of this product
Particle characteristics: No data available. — Not applicable to liquids.

9.2 Other information
9.2.1 Information with regard to physical hazard classes
Explosive properties: Not explosive. Vapours may form explosive mixtures with air.
Oxidising properties: Not oxidising.
Corrosion to metals: Not corrosive

9.2.2 Other safety characteristics
No other relevant information 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
None known under normal use conditions.

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

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Mixture data: .

Relevant calculated ATE(s):
ATE - Oral (mg/kg): >2000

Eye irritation and corrosivity
Result: Eye irritant 2 **Species:** Not applicable. **Method:** Weight of evidence

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)	ATE Oral (mg/kg)
alkyl alcohol ethoxylate	LD_{50}	> 300-2000	Rat	Method not given		1400
Propan-2-ol	LD_{50}	5840	Rat	OECD 401 (EU B.1)		5840
alpha-hexylcinnamaldehyde		3100				Not established
benzyl salicylate	LD_{50}	> 2000		Method not given		Not established
pentyl salicylate		2000				Not established
4-tert-butylcyclohexyl acetate		3370	Rat	Method not given		3370
[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one		No data available				Not established
(Z)-3-hexenyl salicylate		No data available				Not established
d-limonene	LD_{50}	4400 - 5100	Rat	Method not given		4400
7-hydroxycitronellal		No data available				Not established

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)	ATE Dermal (mg/kg)
alkyl alcohol ethoxylate	LD_{50}	> 2000	Rabbit	Method not given		Not established
Propan-2-ol	LD_{50}	> 2000	Rabbit	Method not given		Not established
alpha-hexylcinnamaldehyde		No data available				Not established
benzyl salicylate		No data available				Not established
pentyl salicylate		No data available				Not established
4-tert-butylcyclohexyl acetate		No data available				Not established
[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one		No data available				Not established
(Z)-3-hexenyl salicylate		No data available				Not established
d-limonene	LD_{50}	> 5000	Rabbit	Method not given		Not established
7-hydroxycitronellal		No data available				Not established

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
alkyl alcohol ethoxylate		No data available			
Propan-2-ol	LC_{50}	> 25 (vapour)	Rat	OECD 403 (EU B.2)	6
alpha-hexylcinnamaldehyde		No data available			
benzyl salicylate		No data available			
pentyl salicylate		No data available			
4-tert-butylcyclohexyl acetate		No data available			
[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one		No data available			
(Z)-3-hexenyl salicylate		No data available			
d-limonene		No data available			
7-hydroxycitronellal		No data available			

Acute inhalative toxicity, continued

Ingredient(s)	ATE - inhalation, dust (mg/l)	ATE - inhalation, mist (mg/l)	ATE - inhalation, vapour (mg/l)	ATE - inhalation, gas (mg/l)
alkyl alcohol ethoxylate	Not established	Not established	Not established	Not established
Propan-2-ol	Not established	Not established	Not established	Not established
alpha-hexylcinnamaldehyde	Not established	Not established	Not established	Not established
benzyl salicylate	Not established	Not established	Not established	Not established
pentyl salicylate	Not established	Not established	Not established	Not established
4-tert-butylcyclohexyl acetate	Not established	Not established	Not established	Not established
[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one	Not established	Not established	Not established	Not established
(Z)-3-hexenyl salicylate	Not established	Not established	Not established	Not established
d-limonene	Not established	Not established	Not established	Not established
7-hydroxycitronellal	Not established	Not established	Not established	Not established

Irritation and corrosivity

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
alkyl alcohol ethoxylate	Not irritant	Rabbit	Method not given	
Propan-2-ol	Not irritant	Rabbit	OECD 404 (EU B.4)	
alpha-hexylcinnamaldehyde	No data available			
benzyl salicylate	No data available			
pentyl salicylate	No data available			
4-tert-butylcyclohexyl acetate	No data available			
[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one	No data available			
(Z)-3-hexenyl salicylate	No data available			
d-limonene	Irritant	Rabbit	Method not given	
7-hydroxycitronellal	No data available			

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
alkyl alcohol ethoxylate	Severe damage	Rabbit	Method not given	
Propan-2-ol	Irritant	Rabbit	OECD 405 (EU B.5)	
alpha-hexylcinnamaldehyde	No data available			
benzyl salicylate	No data available			
pentyl salicylate	No data available			
4-tert-butylcyclohexyl acetate	No data available			
[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one	No data available			
(Z)-3-hexenyl salicylate	No data available			
d-limonene	No data available			
7-hydroxycitronellal	No data available			

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
alkyl alcohol ethoxylate	Not irritating to respiratory tract			
Propan-2-ol	No data available			
alpha-hexylcinnamaldehyde	No data available			
benzyl salicylate	No data available			
pentyl salicylate	No data available			
4-tert-butylcyclohexyl acetate	No data available			
[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one	No data available			
(Z)-3-hexenyl salicylate	No data available			
d-limonene	No data available			
7-hydroxycitronellal	No data available			

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
alkyl alcohol ethoxylate	Not sensitising	Guinea pig	Method not given	
Propan-2-ol	Not sensitising	Guinea pig	OECD 406 (EU B.6) / Buehler test	
alpha-hexylcinnamaldehyde	No data available			
benzyl salicylate	No data available			
pentyl salicylate	No data available			
4-tert-butylcyclohexyl acetate	No data available			

[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one	No data available			
(Z)-3-hexenyl salicylate	No data available			
d-limonene	Sensitising	Guinea pig	Method not given	
7-hydroxycitronellal	No data available			

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
alkyl alcohol ethoxylate	No data available			
Propan-2-ol	No data available			
alpha-hexylcinnamaldehyde	No data available			
benzyl salicylate	No data available			
pentyl salicylate	No data available			
4-tert-butylcyclohexyl acetate	No data available			
[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one	No data available			
(Z)-3-hexenyl salicylate	No data available			
d-limonene	No data available			
7-hydroxycitronellal	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)
alkyl alcohol ethoxylate	No evidence for mutagenicity, negative test results	Method not given	No data available	
Propan-2-ol	No evidence for mutagenicity, negative test results No evidence of genotoxicity, negative test results	OECD 471 (EU B.12/13)	No evidence of genotoxicity, negative test results	OECD 474 (EU B.12)
alpha-hexylcinnamaldehyde	No data available		No data available	
benzyl salicylate	No data available		No data available	
pentyl salicylate	No data available		No data available	
4-tert-butylcyclohexyl acetate	No data available		No data available	
[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one	No data available		No data available	
(Z)-3-hexenyl salicylate	No data available		No data available	
d-limonene	No data available		No data available	
7-hydroxycitronellal	No data available		No data available	

Carcinogenicity

Ingredient(s)	Effect
alkyl alcohol ethoxylate	No evidence for carcinogenicity, negative test results
Propan-2-ol	No evidence for carcinogenicity, negative test results
alpha-hexylcinnamaldehyde	No data available
benzyl salicylate	No data available
pentyl salicylate	No data available
4-tert-butylcyclohexyl acetate	No data available
[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one	No data available
(Z)-3-hexenyl salicylate	No data available
d-limonene	No data available
7-hydroxycitronellal	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
alkyl alcohol ethoxylate	NOAEL		> 250	Rat			No known significant effects or critical hazards
Propan-2-ol			No data available				
alpha-hexylcinnamaldehyde			No data available				
benzyl salicylate			No data available				
pentyl salicylate			No data available				
4-tert-butylcyclohexyl acetate			No data available				
[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydr			No data available				

o-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one							
(Z)-3-hexenyl salicylate			No data available				
d-limonene			No data available				
7-hydroxycitronellal			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
alkyl alcohol ethoxylate		No data available				
Propan-2-ol		No data available				
alpha-hexylcinnamaldehyde		No data available				
benzyl salicylate		No data available				
pentyl salicylate		No data available				
4-tert-butylcyclohexyl acetate		No data available				
[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one		No data available				
(Z)-3-hexenyl salicylate		No data available				
d-limonene		No data available				
7-hydroxycitronellal		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
alkyl alcohol ethoxylate	NOAEL	80		OECD 411 (EU B.28)		
Propan-2-ol		No data available				
alpha-hexylcinnamaldehyde		No data available				
benzyl salicylate		No data available				
pentyl salicylate		No data available				
4-tert-butylcyclohexyl acetate		No data available				
[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one		No data available				
(Z)-3-hexenyl salicylate		No data available				
d-limonene		No data available				
7-hydroxycitronellal		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
alkyl alcohol ethoxylate		No data available				
Propan-2-ol		No data available				
alpha-hexylcinnamaldehyde		No data available				
benzyl salicylate		No data available				
pentyl salicylate		No data available				
4-tert-butylcyclohexyl acetate		No data available				
[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one		No data available				
(Z)-3-hexenyl salicylate		No data available				
d-limonene		No data				

		available				
7-hydroxycitronellal		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
alkyl alcohol ethoxylate		NOAEL	80		Method not given			
Propan-2-ol			No data available					
alpha-hexylcinnamaldehyde			No data available					
benzyl salicylate			No data available					
pentyl salicylate			No data available					
4-tert-butylcyclohexyl acetate			No data available					
[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one			No data available					
(Z)-3-hexenyl salicylate			No data available					
d-limonene			No data available					
7-hydroxycitronellal			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
alkyl alcohol ethoxylate	Not applicable
Propan-2-ol	Central nervous system
alpha-hexylcinnamaldehyde	No data available
benzyl salicylate	No data available
pentyl salicylate	No data available
4-tert-butylcyclohexyl acetate	No data available
[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one	No data available
(Z)-3-hexenyl salicylate	No data available
d-limonene	No data available
7-hydroxycitronellal	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
alkyl alcohol ethoxylate	Not applicable
Propan-2-ol	No data available
alpha-hexylcinnamaldehyde	No data available
benzyl salicylate	No data available
pentyl salicylate	No data available
4-tert-butylcyclohexyl acetate	No data available
[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one	No data available
(Z)-3-hexenyl salicylate	No data available
d-limonene	No data available
7-hydroxycitronellal	No data available

Aspiration hazard
Substances with an aspiration hazard (H304), if any, are listed in section 3.

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

11.2 Information on other hazards
11.2.1 Endocrine disrupting properties
Endocrine disrupting properties - Human data, if available:

11.2.2 Other information
No other relevant information available.

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)
alkyl alcohol ethoxylate	LC_{50}	5 - 7	*Fish*	OECD 203 (EU C.1)	96
Propan-2-ol	LC_{50}	> 100	*Pimephales promelas*	Method not given	48
alpha-hexylcinnamaldehyde		No data available			
benzyl salicylate		No data available			
pentyl salicylate		No data available			
4-tert-butylcyclohexyl acetate		No data available			
[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one		No data available			
(Z)-3-hexenyl salicylate		No data available			
d-limonene	LC_{50}	0.72	*Pimephales promelas*	OECD 203 (EU C.1)	96
7-hydroxycitronellal		No data available			

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
alkyl alcohol ethoxylate	EC_{50}	5.3	*Daphnia magna Straus*	92/69/EEC	48
Propan-2-ol	EC_{50}	> 100	*Daphnia magna Straus*	Method not given	48
alpha-hexylcinnamaldehyde		No data available			
benzyl salicylate		No data available			
pentyl salicylate		No data available			
4-tert-butylcyclohexyl acetate		No data available			
[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one		No data available			
(Z)-3-hexenyl salicylate		No data available			
d-limonene	EC_{50}	0.36	*Daphnia magna Straus*	OECD 202 (EU C.2)	48
7-hydroxycitronellal		No data available			

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
alkyl alcohol ethoxylate	EC_{50}	1.4 - 47	*Not specified*	92/69/EEC	72
Propan-2-ol	EC_{50}	> 100	*Scenedesmus quadricauda*	Method not given	72
alpha-hexylcinnamaldehyde		No data available			
benzyl salicylate		No data available			
pentyl salicylate		No data available			
4-tert-butylcyclohexyl acetate		No data available			
[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one		No data available			
(Z)-3-hexenyl salicylate		No data available			
d-limonene	$E_r C_{50}$	150	*Desmodesmus subspicatus*	OECD 201 (EU C.3)	72
7-hydroxycitronellal		No data available			

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
alkyl alcohol ethoxylate		No data available			
Propan-2-ol		No data available			
alpha-hexylcinnamaldehyde		No data available			
benzyl salicylate		No data available			
pentyl salicylate		No data available			
4-tert-butylcyclohexyl acetate		No data available			
[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one		No data available			
(Z)-3-hexenyl salicylate		No data available			
d-limonene		No data available			
7-hydroxycitronellal		No data available			

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
alkyl alcohol ethoxylate	EC_{50}	> 140	*Bacteria*	Method not given	
Propan-2-ol	EC_{50}	> 1000	*Activated sludge*	Method not given	
alpha-hexylcinnamaldehyde		No data available			
benzyl salicylate		No data available			
pentyl salicylate		No data available			
4-tert-butylcyclohexyl acetate		No data available			
[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one		No data available			
(Z)-3-hexenyl salicylate		No data available			
d-limonene		No data available			
7-hydroxycitronellal		No data available			

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
alkyl alcohol ethoxylate	EC_{10}	8983	*Not specified*	Method not given	21 day(s)	
Propan-2-ol		No data available				
alpha-hexylcinnamaldehyde		No data available				
benzyl salicylate		No data available				
pentyl salicylate		No data available				
4-tert-butylcyclohexyl acetate		No data available				
[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one		No data available				
(Z)-3-hexenyl salicylate		No data available				
d-limonene		No data available				
7-hydroxycitronellal		No data available				

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
alkyl alcohol ethoxylate		2579	*Daphnia magna*	Method not given	21 day(s)	

Propan-2-ol		No data available				
alpha-hexylcinnamaldehyde		No data available				
benzyl salicylate		No data available				
pentyl salicylate		No data available				
4-tert-butylcyclohexyl acetate		No data available				
[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one		No data available				
(Z)-3-hexenyl salicylate		No data available				
d-limonene		No data available				
7-hydroxycitronellal		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
alkyl alcohol ethoxylate		No data available				
Propan-2-ol		No data available				
alpha-hexylcinnamaldehyde		No data available				
benzyl salicylate		No data available				
pentyl salicylate		No data available				
4-tert-butylcyclohexyl acetate		No data available				
[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one		No data available				
(Z)-3-hexenyl salicylate		No data available				
d-limonene		No data available				
7-hydroxycitronellal		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
Propan-2-ol		No data available				

Terrestrial toxicity - plants, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
Propan-2-ol		No data available				

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
Propan-2-ol		No data available				

Terrestrial toxicity - beneficial insects, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
Propan-2-ol		No data available				

Terrestrial toxicity - soil bacteria, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
Propan-2-ol		No data				

		available				

12.2 Persistence and degradability

Abiotic degradation

Abiotic degradation - photodegradation in air, if available:

Ingredient(s)	Half-life time	Method	Evaluation	Remark
Propan-2-ol	No data available			

Abiotic degradation - hydrolysis, if available:

Ingredient(s)	Half-life time in fresh water	Method	Evaluation	Remark
Propan-2-ol	No data available			

Abiotic degradation - other processes, if available:

Ingredient(s)	Type	Half-life time	Method	Evaluation	Remark
Propan-2-ol		No data available			

Biodegradation

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT_{50}	Method	Evaluation
alkyl alcohol ethoxylate			80%	Method not given	Readily biodegradable
Propan-2-ol			95 % in 21 day(s)	OECD 301E	Readily biodegradable
alpha-hexylcinnamaldehyde					Not readily biodegradable.
benzyl salicylate				OECD 301F	Readily biodegradable
pentyl salicylate					Not readily biodegradable.
4-tert-butylcyclohexyl acetate				OECD 301B	Readily biodegradable
[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one				OECD 301F	Not readily biodegradable.
(Z)-3-hexenyl salicylate					Not readily biodegradable.
d-limonene			80 % in 28 day(s)	OECD 301D	Readily biodegradable
7-hydroxycitronellal				OECD 301F	Readily biodegradable

Ready biodegradability - anaerobic and marine conditions, if available:

Ingredient(s)	Medium & Type	Analytical method	DT_{50}	Method	Evaluation
Propan-2-ol					No data available

Degradation in relevant environmental compartments, if available:

Ingredient(s)	Medium & Type	Analytical method	DT_{50}	Method	Evaluation
Propan-2-ol					No data available

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
alkyl alcohol ethoxylate	3.11 - 4.19			
Propan-2-ol	0.05	OECD 107	No bioaccumulation expected	
alpha-hexylcinnamaldehyde	No data available			
benzyl salicylate	No data available			
pentyl salicylate	No data available			
4-tert-butylcyclohexyl acetate	No data available			
[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one	No data available			
(Z)-3-hexenyl salicylate	No data available			
d-limonene	No data available		High potential for bioaccumulation	
7-hydroxycitronellal	No data available			

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
alkyl alcohol ethoxylate	< 500				
Propan-2-ol	No data available				
alpha-hexylcinnamaldehyde	No data available				
benzyl salicylate	No data available				
pentyl salicylate	No data available				

4-tert-butylcyclohexyl acetate	No data available				
[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one	No data available				
(Z)-3-hexenyl salicylate	No data available				
d-limonene	683.1		Method not given	High potential for bioaccumulation	
7-hydroxycitronellal	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
alkyl alcohol ethoxylate	No data available				High potential for mobility in soil
Propan-2-ol	No data available				Potential for mobility in soil, soluble in water
alpha-hexylcinnamaldehyde	No data available				
benzyl salicylate	No data available				
pentyl salicylate	No data available				
4-tert-butylcyclohexyl acetate	No data available				
[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one	No data available				
(Z)-3-hexenyl salicylate	No data available				
d-limonene	No data available				High potential for mobility in soil
7-hydroxycitronellal	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 Endocrine disrupting properties
Endocrine disrupting properties - Environmental effects, if available:

12.7 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

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

14.1 UN number or ID number: Non-dangerous goods
14.2 UN proper shipping name: Non-dangerous goods
14.3 Transport hazard class(es): Non-dangerous goods
14.4 Packing group: Non-dangerous goods
14.5 Environmental hazards: Non-dangerous goods
14.6 Special precautions for user: Non-dangerous goods
14.7 Maritime transport in bulk according to IMO instruments: Non-dangerous goods

Other relevant information:
IMO/IMDG

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

National regulations :
• Regulation (EC) 1907/2006 - REACH (UK amended)
• Regulation (EC) 1272/2008 - CLP (UK amended)
• Delegated Regulation (EU) 2017/2100 and Regulation (EU) 2018/605 (UK amended)
• Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)
• International Maritime Dangerous Goods (IMDG) Code

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

Comah - classification: Not classified

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

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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.

Abbreviations and acronyms:
• AISE - The international Association for Soaps, Detergents and Maintenance Products
• ATE - Acute Toxicity Estimate
• DNEL - Derived No Effect Limit
• EC50 - effective concentration, 50%
• ERC - Environmental release categories
• EUH - CLP Specific hazard statement
• LC50 - Lethal Concentration, 50% / Median Lethal Concentration
• LCS - Life cycle stage
• LD50 - Lethal Dose, 50% / Median Lethal dose
• NOAEL - No observed adverse effect level
• NOEL - No observed effect level
• OECD - Organisation for Economic Cooperation and Development
• PBT - Persistent, Bioaccumulative and Toxic
• PNEC - Predicted No Effect Concentration
• PROC - Process categories
• REACH number - REACH registration number, without supplier specific part
• vPvB - very Persistent and very Bioaccumulative
• H225 - Highly flammable liquid and vapour.
• H226 - Flammable liquid and vapour.
• H302 - Harmful if swallowed.
• H304 - May be fatal if swallowed and enters airways.
• H315 - Causes skin irritation.
• H317 - May cause an allergic skin reaction.
• H318 - Causes serious eye damage.
• H319 - Causes serious eye irritation.
• H336 - May cause drowsiness or dizziness.
• H400 - Very toxic to aquatic life.
• H402 - Harmful to aquatic life.
• H410 - Very toxic to aquatic life with long lasting effects.
• H411 - Toxic to aquatic life with long lasting effects.
• H412 - Harmful to aquatic life with long lasting effects.

End of Safety Data Sheet