



Good Sense Spring (Barrettes; Plaque; Solo)

Revision: 2018-01-25

Version: 01.1

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

1.1 Product identifier

Trade name: Good Sense Spring (Barrettes; Plaque; Solo)

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

Identified uses:

AISE-C18 - Air fresheners non-aerosol

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: customerservice.uk@diversey.com

1.4 Emergency telephone number

For medical or environmental emergency only:
call 0800 052 0185

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Eye Dam. 1 (H318)
Skin Sens. 1 (H317)
Aquatic Chronic 3 (H412)

2.2 Label elements



Signal word: Danger.

Contains alpha-hexylcinnamaldehyde (Hexyl Cinnamal), geraniol (Geraniol), eugenol (Eugenol), citral (Citral).

Hazard statements:

H318 - Causes serious eye damage.
H317 - May cause an allergic skin reaction.
H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements:

P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.
P280 - Wear protective gloves and eye or face protection.
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.
P501 - Dispose of unused content as chemical waste.

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

Good Sense Spring (Barrettes; Plaque; Solo)

3.2 Mixtures

Ingredient(s)	EC number	CAS number	REACH number	Classification	Notes	Weight percent
alpha-hexylcinnamaldehyde	202-983-3	101-86-0	No data available	Skin Sens. 1B (H317) Aquatic Chronic 2 (H411)		3-10
geraniol	203-377-1	106-24-1	No data available	Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Skin Sens. 1 (H317)		3-10
eugenol	202-589-1	97-53-0	No data available	Eye Irrit. 2 (H319) Skin Sens. 1B (H317)		1-3
4-(2,6,6-trimethylcyclohex-1-ene-1-yl)-but-3-ene-2-one	238-969-9	14901-07-6	No data available	Aquatic Chronic 2 (H411)		1-3
citral	226-394-6	5392-40-5	No data available	Skin Irrit. 2 (H315) Skin Sens. 1 (H317)		1-3
citronellol	203-375-0	106-22-9	No data available	Skin Irrit. 2 (H315) Skin Sens. 1 (H317) Aquatic Chronic 2 (H411)		0.1-1
3-p-cumenyl-2-methylpropionaldehyde	203-161-7	103-95-7	No data available	Repr. 2 (H361) Skin Irrit. 2 (H315) Skin Sens. 1B (H317) Aquatic Chronic 2 (H411)		0.1-1
d-limonene	227-813-5	5989-27-5	01-2119529223-47	Flam. Liq. 3 (H226) Asp. Tox. 1 (H304) Skin Irrit. 2 (H315) Skin Sens. 1B (H317) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)		0.1-1

* Polymer.

For the full text of the 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

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. Take off immediately all contaminated clothing and wash it before re-use. If skin irritation occurs: Get medical advice or attention.

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:

Immediately drink 1 glass of water. 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 or permanent damage.

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

Good Sense Spring (Barrettes; Plaque; Solo)

6.1 Personal precautions, protective equipment and emergency procedures

Wear suitable 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. 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

Collect mechanically.

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 advised by Diversey. Wash hands before breaks and at the end of workday. Wash face, hands and any exposed skin thoroughly after handling. Take off immediately all contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Use personal protective equipment as required. Avoid contact with 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:

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
alpha-hexylcinnamaldehyde	No data available	No data available	No data available	No data available
geraniol	No data available	No data available	No data available	No data available
eugenol	No data available	No data available	No data available	No data available
4-(2,6,6-trimethylcyclohex-1-ene-1-yl)-but-3-ene-2-one	No data available	No data available	No data available	No data available
citral	No data available	No data available	No data available	No data available
citronellol	No data available	No data available	No data available	No data available
3-p-cumenyl-2-methylpropionaldehyde	No data available	No data available	No data available	No data available
d-limonene	-	-	-	4.76

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)
alpha-hexylcinnamaldehyde	No data available	No data available	No data available	No data available
geraniol	No data available	No data available	No data available	No data available
eugenol	No data available	No data available	No data available	No data available
4-(2,6,6-trimethylcyclohex-1-ene-1-yl)-but-3-ene-2-one	No data available	No data available	No data available	No data available
citral	No data available	No data available	No data available	No data available
citronellol	No data available	No data available	No data available	No data available

Good Sense Spring (Barrettes; Plaque; Solo)

3-p-cumenyl-2-methylpropionaldehyde	No data available	No data available	No data available	No data available
d-limonene	0.222 mg/cm ² skin	-	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)
alpha-hexylcinnamaldehyde	No data available	No data available	No data available	No data available
geraniol	No data available	No data available	No data available	No data available
eugenol	No data available	No data available	No data available	No data available
4-(2,6,6-trimethylcyclohex-1-ene-1-yl)-but-3-ene-2-one	No data available	No data available	No data available	No data available
citral	No data available	No data available	No data available	No data available
citronellol	No data available	No data available	No data available	No data available
3-p-cumenyl-2-methylpropionaldehyde	No data available	No data available	No data available	No data available
d-limonene	0.111 mg/cm ² skin	-	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
alpha-hexylcinnamaldehyde	No data available	No data available	No data available	No data available
geraniol	No data available	No data available	No data available	No data available
eugenol	No data available	No data available	No data available	No data available
4-(2,6,6-trimethylcyclohex-1-ene-1-yl)-but-3-ene-2-one	No data available	No data available	No data available	No data available
citral	No data available	No data available	No data available	No data available
citronellol	No data available	No data available	No data available	No data available
3-p-cumenyl-2-methylpropionaldehyde	No data available	No data available	No data available	No data available
d-limonene	-	-	-	33.3

DNEL inhalatory exposure - Consumer (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
alpha-hexylcinnamaldehyde	No data available	No data available	No data available	No data available
geraniol	No data available	No data available	No data available	No data available
eugenol	No data available	No data available	No data available	No data available
4-(2,6,6-trimethylcyclohex-1-ene-1-yl)-but-3-ene-2-one	No data available	No data available	No data available	No data available
citral	No data available	No data available	No data available	No data available
citronellol	No data available	No data available	No data available	No data available
3-p-cumenyl-2-methylpropionaldehyde	No data available	No data available	No data available	No data available
d-limonene	-	-	-	8.33

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)
alpha-hexylcinnamaldehyde	No data available	No data available	No data available	No data available
geraniol	No data available	No data available	No data available	No data available
eugenol	No data available	No data available	No data available	No data available
4-(2,6,6-trimethylcyclohex-1-ene-1-yl)-but-3-ene-2-one	No data available	No data available	No data available	No data available
citral	No data available	No data available	No data available	No data available
citronellol	No data available	No data available	No data available	No data available
3-p-cumenyl-2-methylpropionaldehyde	No data available	No data available	No data available	No data available
d-limonene	0.0054	0.00054	-	1.8

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m ³)
alpha-hexylcinnamaldehyde	No data available	No data available	No data available	No data available
geraniol	No data available	No data available	No data available	No data available
eugenol	No data available	No data available	No data available	No data available
4-(2,6,6-trimethylcyclohex-1-ene-1-yl)-but-3-ene-2-one	No data available	No data available	No data available	No data available
citral	No data available	No data available	No data available	No data available
citronellol	No data available	No data available	No data available	No data available
3-p-cumenyl-2-methylpropionaldehyde	No data available	No data available	No data available	No data available
d-limonene	1.32	0.13	0.262	-

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:

Good Sense Spring (Barrettes; Plaque; Solo)

Appropriate engineering controls: No special requirements under normal use conditions.
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).
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: \geq 480 min
 Material thickness: \geq 0.7 mm
 Suggested gloves for protection against splashes: Material: nitrile rubber Penetration time: \geq 30 min
 Material thickness: \geq 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.

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: Solid	
Colour: Clear, Pale, Orange	
Odour: Perfumed	
Odour threshold: Not applicable	
pH:	
Melting point/freezing point (°C): Not determined	Not relevant to classification of this product
Initial boiling point and boiling range (°C): Not determined	

Substance data, boiling point

Ingredient(s)	Value (°C)	Method	Atmospheric pressure (hPa)
alpha-hexylcinnamaldehyde	No data available		
geraniol	No data available		
eugenol	No data available		
4-(2,6,6-trimethylcyclohex-1-ene-1-yl)-but-3-ene-2-one	No data available		
citral	No data available		
citronellol	No data available		
3-p-cumenyl-2-methylpropionaldehyde	No data available		
d-limonene	175-178	Method not given	1013

Method / remark

Flash point (°C): Not applicable.
Sustained combustion: Not applicable.
 (UN Manual of Tests and Criteria, section 32, L.2)
Evaporation rate: Not determined
Flammability (solid, gas): Not determined
Upper/lower flammability limit (%): Not determined

Substance data, flammability or explosive limits, if available:

Ingredient(s)	Lower limit (% vol)	Upper limit (% vol)
d-limonene	0.7	6.1

Method / remark

Vapour pressure: Not determined

Substance data, vapour pressure

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
alpha-hexylcinnamaldehyde	No data available		
geraniol	No data available		
eugenol	No data available		
4-(2,6,6-trimethylcyclohex-1-ene-1-yl)-but-3-ene-2-one	No data available		
citral	No data available		
citronellol	No data available		
3-p-cumenyl-2-methylpropionaldehyde	No data available		
d-limonene	190-230	Method not given	20

Good Sense Spring (Barrettes; Plaque; Solo)

Method / remark

Vapour density: Not determined
Relative density: ≈ 1.00 (20 °C)
Solubility in / Miscibility with Water: Insoluble

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
alpha-hexylcinnamaldehyde	No data available		
geraniol	No data available		
eugenol	No data available		
4-(2,6,6-trimethylcyclohex-1-ene-1-yl)-but-3-ene-2-one	No data available		
citral	No data available		
citronellol	No data available		
3-p-cumenyl-2-methylpropionaldehyde	No data available		
d-limonene	Insoluble	Method not given	20

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

Method / remark

Autoignition temperature: Not determined
Decomposition temperature: Not applicable.
Viscosity: Not determined
Explosive properties: Not explosive.
Oxidising properties: Not oxidising.

9.2 Other information

Surface tension (N/m): Not determined
Corrosion to metals: Not determined

Not relevant to classification of this product
 Not applicable to solids or gases

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

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 toxicological effects

No data is available on the mixture.

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

Acute toxicity

Acute oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
alpha-hexylcinnamaldehyde		No data available			
geraniol		No data available			
eugenol		No data available			

Good Sense Spring (Barrettes; Plaque; Solo)

4-(2,6,6-trimethylcyclohex-1-ene-1-yl)-but-3-ene-2-one		No data available			
citral		No data available			
citronellol		No data available			
3-p-cumenyl-2-methylpropionaldehyde		No data available			
d-limonene	LD ₅₀	4400 - 5100	Rat	Method not given	

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
alpha-hexylcinnamaldehyde		No data available			
geraniol		No data available			
eugenol		No data available			
4-(2,6,6-trimethylcyclohex-1-ene-1-yl)-but-3-ene-2-one		No data available			
citral		No data available			
citronellol		No data available			
3-p-cumenyl-2-methylpropionaldehyde		No data available			
d-limonene	LD ₅₀	> 5000	Rabbit	Method not given	

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
alpha-hexylcinnamaldehyde		No data available			
geraniol		No data available			
eugenol		No data available			
4-(2,6,6-trimethylcyclohex-1-ene-1-yl)-but-3-ene-2-one		No data available			
citral		No data available			
citronellol		No data available			
3-p-cumenyl-2-methylpropionaldehyde		No data available			
d-limonene		No data available			

Irritation and corrosivity

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
alpha-hexylcinnamaldehyde	No data available			
geraniol	No data available			
eugenol	No data available			
4-(2,6,6-trimethylcyclohex-1-ene-1-yl)-but-3-ene-2-one	No data available			
citral	No data available			
citronellol	No data available			
3-p-cumenyl-2-methylpropionaldehyde	No data available			
d-limonene	Irritant	Rabbit	Method not given	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
alpha-hexylcinnamaldehyde	No data available			
geraniol	No data available			
eugenol	No data available			
4-(2,6,6-trimethylcyclohex-1-ene-1-yl)-but-3-ene-2-one	No data available			
citral	No data available			
citronellol	No data available			
3-p-cumenyl-2-methylpropionaldehyde	No data available			
d-limonene	No data available			

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
alpha-hexylcinnamaldehyde	No data available			

Good Sense Spring (Barrettes; Plaque; Solo)

geraniol	No data available			
eugenol	No data available			
4-(2,6,6-trimethylcyclohex-1-ene-1-yl)-but-3-ene-2-one	No data available			
citral	No data available			
citronellol	No data available			
3-p-cumenyl-2-methylpropionaldehyde	No data available			
d-limonene	No data available			

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
alpha-hexylcinnamaldehyde	No data available			
geraniol	No data available			
eugenol	No data available			
4-(2,6,6-trimethylcyclohex-1-ene-1-yl)-but-3-ene-2-one	No data available			
citral	No data available			
citronellol	No data available			
3-p-cumenyl-2-methylpropionaldehyde	No data available			
d-limonene	Sensitising	Guinea pig	Method not given	

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
alpha-hexylcinnamaldehyde	No data available			
geraniol	No data available			
eugenol	No data available			
4-(2,6,6-trimethylcyclohex-1-ene-1-yl)-but-3-ene-2-one	No data available			
citral	No data available			
citronellol	No data available			
3-p-cumenyl-2-methylpropionaldehyde	No data available			
d-limonene	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)
alpha-hexylcinnamaldehyde	No data available		No data available	
geraniol	No data available		No data available	
eugenol	No data available		No data available	
4-(2,6,6-trimethylcyclohex-1-ene-1-yl)-but-3-ene-2-one	No data available		No data available	
citral	No data available		No data available	
citronellol	No data available		No data available	
3-p-cumenyl-2-methylpropionaldehyde	No data available		No data available	
d-limonene	No data available		No data available	

Carcinogenicity

Ingredient(s)	Effect
alpha-hexylcinnamaldehyde	No data available
geraniol	No data available
eugenol	No data available
4-(2,6,6-trimethylcyclohex-1-ene-1-yl)-but-3-ene-2-one	No data available
citral	No data available
citronellol	No data available
3-p-cumenyl-2-methylpropionaldehyde	No data available
d-limonene	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
alpha-hexylcinnamaldehyde			No data available				
geraniol			No data available				
eugenol			No data available				
4-(2,6,6-trimethylcyclohex-1-ene-1-yl)-but-3-ene-2-one			No data available				
citral			No data available				
citronellol			No data available				

Good Sense Spring (Barrettes; Plaque; Solo)

			available				
3-p-cumenyl-2-methylpropionaldehyde			No data available				
d-limonene			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
alpha-hexylcinnamaldehyde		No data available				
geraniol		No data available				
eugenol		No data available				
4-(2,6,6-trimethylcyclohex-1-ene-1-yl)-but-3-ene-2-one		No data available				
citral		No data available				
citronellol		No data available				
3-p-cumenyl-2-methylpropionaldehyde		No data available				
d-limonene		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
alpha-hexylcinnamaldehyde		No data available				
geraniol		No data available				
eugenol		No data available				
4-(2,6,6-trimethylcyclohex-1-ene-1-yl)-but-3-ene-2-one		No data available				
citral		No data available				
citronellol		No data available				
3-p-cumenyl-2-methylpropionaldehyde		No data available				
d-limonene		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
alpha-hexylcinnamaldehyde		No data available				
geraniol		No data available				
eugenol		No data available				
4-(2,6,6-trimethylcyclohex-1-ene-1-yl)-but-3-ene-2-one		No data available				
citral		No data available				
citronellol		No data available				
3-p-cumenyl-2-methylpropionaldehyde		No data available				
d-limonene		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
alpha-hexylcinnamaldehyde			No data available					
geraniol			No data available					
eugenol			No data available					
4-(2,6,6-trimethylcyclohex-1-ene-1-yl)-but-3-ene-2-one			No data available					
citral			No data available					
citronellol			No data available					

Good Sense Spring (Barrettes; Plaque; Solo)

			available				
3-p-cumenyl-2-methylpropionaldehyde			No data available				
d-limonene			No data available				

STOT-single exposure

Ingredient(s)	Affected organ(s)
alpha-hexylcinnamaldehyde	No data available
geraniol	No data available
eugenol	No data available
4-(2,6,6-trimethylcyclohex-1-ene-1-yl)-but-3-ene-2-one	No data available
citral	No data available
citronellol	No data available
3-p-cumenyl-2-methylpropionaldehyde	No data available
d-limonene	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
alpha-hexylcinnamaldehyde	No data available
geraniol	No data available
eugenol	No data available
4-(2,6,6-trimethylcyclohex-1-ene-1-yl)-but-3-ene-2-one	No data available
citral	No data available
citronellol	No data available
3-p-cumenyl-2-methylpropionaldehyde	No data available
d-limonene	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)
alpha-hexylcinnamaldehyde		No data available			
geraniol		No data available			
eugenol		No data available			
4-(2,6,6-trimethylcyclohex-1-ene-1-yl)-but-3-ene-2-one		No data available			
citral		No data available			
citronellol		No data available			
3-p-cumenyl-2-methylpropionaldehyde		No data available			
d-limonene	LC ₅₀	0.72	<i>Pimephales promelas</i>	OECD 203 (EU C.1)	96

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
alpha-hexylcinnamaldehyde		No data available			
geraniol		No data available			
eugenol		No data available			
4-(2,6,6-trimethylcyclohex-1-ene-1-yl)-but-3-ene-2-one		No data available			
citral		No data available			

Good Sense Spring (Barrettes; Plaque; Solo)

		available			
citronellol		No data available			
3-p-cumenyl-2-methylpropionaldehyde		No data available			
d-limonene	EC ₅₀	0.36	<i>Daphnia magna Straus</i>	OECD 202 (EU C.2)	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
alpha-hexylcinnamaldehyde		No data available			
geraniol		No data available			
eugenol		No data available			
4-(2,6,6-trimethylcyclohex-1-ene-1-yl)-but-3-ene-2-one		No data available			
citral		No data available			
citronellol		No data available			
3-p-cumenyl-2-methylpropionaldehyde		No data available			
d-limonene	E _r C ₅₀	150	<i>Desmodemus subspicatus</i>	OECD 201 (EU C.3)	72

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
alpha-hexylcinnamaldehyde		No data available			
geraniol		No data available			
eugenol		No data available			
4-(2,6,6-trimethylcyclohex-1-ene-1-yl)-but-3-ene-2-one		No data available			
citral		No data available			
citronellol		No data available			
3-p-cumenyl-2-methylpropionaldehyde		No data available			
d-limonene		No data available			-

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
alpha-hexylcinnamaldehyde		No data available			
geraniol		No data available			
eugenol		No data available			
4-(2,6,6-trimethylcyclohex-1-ene-1-yl)-but-3-ene-2-one		No data available			
citral		No data available			
citronellol		No data available			
3-p-cumenyl-2-methylpropionaldehyde		No data available			
d-limonene		No data available			

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
alpha-hexylcinnamaldehyde		No data available				
geraniol		No data available				
eugenol		No data available				
4-(2,6,6-trimethylcyclohex-1-ene-1-yl)-but-3-ene-2-one		No data available				
citral		No data available				

Good Sense Spring (Barrettes; Plaque; Solo)

citronellol		No data available				
3-p-cumenyl-2-methylpropionaldehyde		No data available				
d-limonene		No data available				

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
alpha-hexylcinnamaldehyde		No data available				
geraniol		No data available				
eugenol		No data available				
4-(2,6,6-trimethylcyclohex-1-ene-1-yl)-but-3-ene-2-one		No data available				
citral		No data available				
citronellol		No data available				
3-p-cumenyl-2-methylpropionaldehyde		No data available				
d-limonene		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
alpha-hexylcinnamaldehyde		No data available				
geraniol		No data available				
eugenol		No data available				
4-(2,6,6-trimethylcyclohex-1-ene-1-yl)-but-3-ene-2-one		No data available				
citral		No data available				
citronellol		No data available				
3-p-cumenyl-2-methylpropionaldehyde		No data available				
d-limonene		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
d-limonene		No data available			-	

Terrestrial toxicity - plants, if available:

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

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
d-limonene		No data available			-	

Terrestrial toxicity - beneficial insects, if available:

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

Terrestrial toxicity - soil bacteria, if available:

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

Good Sense Spring (Barrettes; Plaque; Solo)

		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
alpha-hexylcinnamaldehyde					Not readily biodegradable.
geraniol				OECD 301F	Readily biodegradable
eugenol					Readily biodegradable
4-(2,6,6-trimethylcyclohex-1-ene-1-yl)-but-3-ene-2-one					No data available
citral				OECD 301F	Readily biodegradable
citronellol	Activated sludge, aerobe	CO ₂ production		OECD 301F	Readily biodegradable
3-p-cumenyl-2-methylpropionaldehyde				OECD 301B	Readily biodegradable
d-limonene			80 % in 28 day(s)	OECD 301D	Readily biodegradable

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
alpha-hexylcinnamaldehyde	No data available			
geraniol	No data available			
eugenol	No data available			
4-(2,6,6-trimethylcyclohex-1-ene-1-yl)-but-3-ene-2-one	No data available			
citral	No data available			
citronellol	No data available			
3-p-cumenyl-2-methylpropionaldehyde	No data available			
d-limonene	No data available		High potential for bioaccumulation	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
alpha-hexylcinnamaldehyde	No data available				
geraniol	No data available				
eugenol	No data available				
4-(2,6,6-trimethylcyclohex-1-ene-1-yl)-but-3-ene-2-one	No data available				
citral	No data available				
citronellol	No data available				
3-p-cumenyl-2-methylpropionaldehyde	No data available				
d-limonene	683.1		Method not given	High potential for bioaccumulation	

12.4 Mobility in soil

Adsorption/Desorption to soil or sediment

Ingredient(s)	Adsorption coefficient Log K _{oc}	Desorption coefficient Log K _{oc} (des)	Method	Soil/sediment type	Evaluation
alpha-hexylcinnamaldehyde	No data available				
geraniol	No data available				
eugenol	No data available				
4-(2,6,6-trimethylcyclohex-1-ene-1-yl)-but-3-ene-2-one	No data available				
citral	No data available				
citronellol	No data available				
3-p-cumenyl-2-methylpropionaldehyde	No data available				
d-limonene	No data available				High potential for mobility in soil

12.5 Results of PBT and vPvB assessment

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

Good Sense Spring (Barrettes; Plaque; Solo)

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:

16 03 05* - organic wastes containing dangerous substances.

Empty packaging**Recommendation:**

Dispose of observing national or local regulations.

SECTION 14: Transport information**Land transport (ADR/RID), Sea transport (IMDG), Air transport (ICAO-TI / IATA-DGR)**

14.1 UN 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 Transport in bulk according to Annex II of MARPOL and the IBC Code: Non-dangerous goods

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulations:**

- Regulation (EC) No 1272/2008 - CLP
- Regulation (EC) No. 1907/2006 - REACH

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

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: MS1002092

Version: 01.1

Revision: 2018-01-25

Reason for revision:

This data sheet contains changes from the previous version in section(s):, 2, 3, 16

Classification procedure

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

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

- H226 - Flammable liquid and vapour.
- 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.
- H361 - Suspected of damaging fertility or the unborn child.
- H400 - Very toxic to aquatic life.
- H410 - Very toxic to aquatic life with long lasting effects.
- H411 - Toxic to aquatic life with long lasting effects.

Abbreviations and acronyms:

- AISE - The international Association for Soaps, Detergents and Maintenance Products
- DNEL - Derived No Effect Limit
- EUH - CLP Specific hazard statement
- PBT - Persistent, Bioaccumulative and Toxic
- PNEC - Predicted No Effect Concentration
- REACH number - REACH registration number, without supplier specific part
- vPvB - very Persistent and very Bioaccumulative
- ATE - Acute Toxicity Estimate

End of Safety Data Sheet