Safety Data Sheet

According to Regulation (EC) No 1907/2006

Good Sense Fresh O3b

Revision: 2022-12-01 **Version:** 01.0

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

1.1 Product identifier
Trade name: Good Sense Fresh O3b

UFI: 0PDH-T1UG-M00A-13K5

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_11_1
AISE_SWED_PW_19_1

1.3 Details of the supplier of the safety data sheet
Diversey Europe Operations BV, Maarssenbroeksedijk 2, 3542DN Utrecht, The Netherlands
Tel: 01 8081808 (9am - 5pm Mon-Fri)
Email: dublin.orders@diversey.com

1.4 Emergency telephone number
Seek medical advice (show the label or safety data sheet where possible).
National Poisons Information Centre
Tel: 01 809 2166. (8.00 a.m. to 10.00 p.m. 7 days a week)
Tel: 01 809 2566 (health care professionals).

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Aerosol 1 (H222)
Aquatic Chronic 3 (H412)

2.2 Label elements

Signal word: Danger.

Contains 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) (Methylchloroisothiazolinone, Methylisothiazolinone), 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)

Hazard statements:
H222 - Extremely flammable aerosol.
H229 - Pressurised container: May burst if heated.
EUH208 - May produce an allergic reaction.
H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements:
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211 - Do not spray on an open flame or other ignition source.
P251 - Do not pierce or burn, even after use.
P410 + P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C.

Further indications on the label:
Contains: preservative.

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
butane	203-448-7	106-97-8	01-2119474691-32	Flam. Gas 1 (H220) Press. Gas (Comp.) (H280)		20-30
propane	200-827-9	74-98-6	01-2119486944-21	Flam. Gas 1 (H220) Press. Gas (Comp.) (H280)		3-10
alpha-hexylcinnamaldehyde	202-983-3	101-86-0	01-2119533092-50	Skin Sens. 1B (H317) Aquatic Acute 1 (H400) Aquatic Chronic 2 (H411)		0.1-1
benzyl salicylate	204-262-9	118-58-1	01-2119969442-31	Eye Irrit. 2 (H319) Skin Sens. 1B (H317) Aquatic Chronic 3 (H412)		0.1-1
isobutane	200-857-2	75-28-5	01-2119485395-27	Flam. Gas 1 (H220) Press. Gas (Comp.) (H280)		0.1-1
4-tert-butylcyclohexyl acetate	250-954-9	32210-23-4	01-2119976286-24	Skin Sens. 1B (H317) Aquatic Chronic 2 (H411)		0.1-1
pentyl salicylate	218-080-2	2050-08-0	01-2119969444-27	Acute Tox. 4 (H302) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)		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 Sens. 1B (H317) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)		0.1-1
(Z)-3-hexenyl salicylate	265-745-8	65405-77-8	01-2119987320-37	Skin Sens. 1B (H317) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)		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 3 (H412)		0.1-1
trimethyloctadecylammonium chloride	203-929-1	112-03-8	01-2119970559-21	Acute Tox. 3 (H311) Skin Corr. 1C (H314) Acute Tox. 4 (H302) Eye Dam. 1 (H318) Aquatic Acute 1 M=10 (H400) Aquatic Chronic 1 (H410)		0.01-0.1
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	220-239-6 247-500-7	55965-84-9	[6]	Acute Tox. 2 (H310) Acute Tox. 2 (H330) Acute Tox. 3 (H301) Skin Corr. 1C (H314) EUH071 Eye Dam. 1 (H318) Skin Sens. 1A (H317) Aquatic Acute 1 M=100 (H400) Aquatic Chronic 1 M=100 (H410)		< 0.01

Specific concentration limits
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1):
• Skin Sens. 1 (H317) >= 0.0015%
• Eye Dam. 1 (H318) >= 0.6% > Eye Irrit. 2 (H319) >= 0.06%
• Skin Corr. 1C (H314) >= 0.6% > Skin Irrit. 2 (H315) >= 0.06%

Workplace exposure limit(s), if available, are listed in subsection 8.1.
ATE, if available, are listed in section 11.
[6] Exempted: biocidal active. See Article 15(2) of Regulation (EC) No 1907/2006.

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

SECTION 4: First aid measures

4.1 Description of first aid measures

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

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

Eye contact: Rinse cautiously with water for several minutes. 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: Direct contact can damage skin by freezing.

Eye contact: Direct contact can damage the eye by freezing.

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

Cool endangered packaging with water spray jet.

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

No special measures required.

6.2 Environmental precautions

No special environmental precautions required.

6.3 Methods and material for containment and cleaning up

Absorb liquid components with liquid-binding material.

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:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. BEWARE: Aerosol is pressurized. Keep away from direct sun exposure and temperatures over 50° C. Do not open by force or throw into fire even after use. Do not spray on flames or red-hot objects. Use non-sparking tools.

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. 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. Keep away from heat and direct sunlight.
For conditions to avoid see subsection 10.4. For incompatible materials see subsection 10.5.

Seveso - Lower Tier requirements (tonnes): 150
Seveso - Upper Tier requirements (tonnes): 500

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)	Long term value(s)	Short term value(s)
butane	1000 ppm	3000 ppm
propane		3000 ppm
isobutane		3000 ppm

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
butane	No data available	No data available	No data available	No data available
propane	No data available	No data available	No data available	No data available
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
isobutane	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
pentyl salicylate	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
trimethyloctadecylammonium chloride	-	-	-	2.83
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	-	-	-	-

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)
butane	No data available	No data available	No data available	No data available
propane	No data available	No data available	No data available	No data available
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
isobutane	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
pentyl salicylate	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	-
trimethyloctadecylammonium chloride	-	-	0.11 mg/cm² skin	4.7
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	-	-	-	-

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)
butane	No data available	No data available	No data available	No data available
propane	No data available	No data available	No data available	No data available
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
isobutane	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
pentyl salicylate	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-tetramet	No data available	No data available	No data available	No data available

hyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one				
(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	-
trimethyloctadecylammonium chloride	-	-	0.06 mg/cm² skin	2.83
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	-	-	-	-

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
butane	No data available	No data available	No data available	No data available
propane	No data available	No data available	No data available	No data available
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
isobutane	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
pentyl salicylate	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
trimethyloctadecylammonium chloride	-	-	-	3.32
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	-	-	-	-

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
butane	No data available	No data available	No data available	No data available
propane	No data available	No data available	No data available	No data available
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
isobutane	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
pentyl salicylate	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
trimethyloctadecylammonium chloride	-	-	-	0.98
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	-	-	-	-

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)
butane	No data available	No data available	No data available	No data available
propane	No data available	No data available	No data available	No data available
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
isobutane	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
pentyl salicylate	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
trimethyloctadecylammonium chloride	0.001	0.000068	0.00037	0.48
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	-	-	-	-

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m³)
butane	No data available	No data available	No data available	No data available
propane	No data available	No data available	No data available	No data available
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
isobutane	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

pentyl salicylate	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	-
trimethyloctadecylammonium chloride	9.27	0.927	7	-
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	-	-	-	-

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: Provide a good standard of general ventilation.
Appropriate organisational controls: Avoid direct contact and/or splashes where possible. Train personnel. Users are advised to consider national Occupational Exposure Limits or other equivalent values, if available.

REACH use scenarios considered for the undiluted product:

	SWED - Sector-specific worker exposure description	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: Aerosol
Colour: Translucent , Colourless
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 — Not applicable as product is an aerosol

Substance data, boiling point

Ingredient(s)	Value (°C)	Method	Atmospheric pressure (hPa)
butane	No data available		
propane	No data available		
alpha-hexylcinnamaldehyde	No data available		
benzyl salicylate	No data available		
isobutane	No data available		
4-tert-butylcyclohexyl acetate	No data available		
pentyl salicylate	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
trimethyloctadecylammonium chloride	235-249	OECD 103 (EU A.2)	
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	No data available		

Method / remark

Flammability (solid, gas): Not determined
Flammability (liquid): Not applicable. Not flammable.
Flash point (°C): Not applicable as product is an aerosol
Sustained combustion: Not applicable.
(UN Manual of Tests and Criteria, section 32, L.2)
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)
d-limonene	0.7	6.1

Method / remark

Autoignition temperature: Not determined
Decomposition temperature: Not applicable.
pH: No information available.
Kinematic viscosity: Not determined
Solubility in / Miscibility with water: Fully miscible

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
butane	No data available		
propane	No data available		
alpha-hexylcinnamaldehyde	No data available		
benzyl salicylate	No data available		
isobutane	No data available		
4-tert-butylcyclohexyl acetate	No data available		
pentyl salicylate	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
trimethyloctadecylammonium chloride	No data available		
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	No data available		

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

Method / remark

Vapour pressure: Not determined

Substance data, vapour pressure

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
butane	No data available		
propane	No data available		
alpha-hexylcinnamaldehyde	No data available		
benzyl salicylate	No data available		
isobutane	No data available		
4-tert-butylcyclohexyl acetate	No data available		
pentyl salicylate	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
trimethyloctadecylammonium chloride	< 0	OECD 104 (EU A.4)	20
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	No data available		

Method / remark

Relative density: ≈ 0.82 (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: Vapours may form explosive mixtures with air. Not explosive.
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 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)	ATE (mg/kg)
butane		No data available				Not established
propane		No data available				Not established
alpha-hexylcinnamaldehyde		3100				Not established
benzyl salicylate	LD_{50}	> 2000		Method not given		Not established
isobutane		No data available				Not established
4-tert-butylcyclohexyl acetate		3370	Rat	Method not given		3.1e+006
pentyl salicylate		2000				3.7e+006
[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		4.1e+006
trimethyloctadecylammonium chloride	LD_{50}	560.5	Rat	OECD 401 (EU B.1)	ECHA+RM0 02472 Clariant ESDS 2021	550000
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	LD_{50}	64	Rat	Method not given		6e+006

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)	ATE (mg/kg)
butane		No data available				Not established
propane		No data available				Not established
alpha-hexylcinnamaldehyde		No data available				Not established

benzyl salicylate		No data available				Not established
isobutane		No data available				Not established
4-tert-butylcyclohexyl acetate		No data available				Not established
pentyl salicylate		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
trimethyloctadecylammonium chloride	LD_{50}	528	Rabbit	OECD 402 (EU B.3)		330000
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	LD_{50}	87.12	Rabbit	Method not given		4.7e+006

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
butane		No data available			
propane		No data available			
alpha-hexylcinnamaldehyde		No data available			
benzyl salicylate		No data available			
isobutane		No data available			
4-tert-butylcyclohexyl acetate		No data available			
pentyl salicylate		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			
trimethyloctadecylammonium chloride		No data available			
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	LC_{50}	0.33	Rat		

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)
butane	Not established	Not established	Not established	Not established
propane	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
isobutane	Not established	Not established	Not established	Not established
4-tert-butylcyclohexyl acetate	Not established	Not established	Not established	Not established
pentyl salicylate	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
trimethyloctadecylammonium chloride	Not established	Not established	Not established	Not established
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	Not established	19000	Not established	Not established

Irritation and corrosivity

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
butane	No data available			
propane	No data available			
alpha-hexylcinnamaldehyde	No data available			
benzyl salicylate	No data available			
isobutane	No data available			
4-tert-butylcyclohexyl acetate	No data available			
pentyl salicylate	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	
trimethyloctadecylammonium chloride	Corrosive	Rabbit	OECD 404 (EU B.4)	4 hour(s)
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	Corrosive		Method not given	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
butane	No data available			
propane	No data available			
alpha-hexylcinnamaldehyde	No data available			
benzyl salicylate	No data available			
isobutane	No data available			
4-tert-butylcyclohexyl acetate	No data available			
pentyl salicylate	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			
trimethyloctadecylammonium chloride	Severe damage			
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	Severe damage		Method not given	

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
butane	No data available			
propane	No data available			
alpha-hexylcinnamaldehyde	No data available			
benzyl salicylate	No data available			
isobutane	No data available			
4-tert-butylcyclohexyl acetate	No data available			
pentyl salicylate	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			
trimethyloctadecylammonium chloride	No data available			
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	No data available			

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
butane	No data available			
propane	No data available			
alpha-hexylcinnamaldehyde	No data available			
benzyl salicylate	No data available			
isobutane	No data available			
4-tert-butylcyclohexyl acetate	No data available			
pentyl salicylate	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	
trimethyloctadecylammonium chloride	Not sensitising	Guinea pig	OECD 406 (EU B.6) / Buehler test	
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	Sensitising	Guinea pig	Method not given OECD 406 (EU B.6) / GPMT	

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
butane	No data available			
propane	No data available			
alpha-hexylcinnamaldehyde	No data available			
benzyl salicylate	No data available			
isobutane	No data available			
4-tert-butylcyclohexyl acetate	No data available			

pentyl salicylate	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			
trimethyloctadecylammonium chloride	No data available			
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	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)
butane	No data available		No data available	
propane	No data available		No data available	
alpha-hexylcinnamaldehyde	No data available		No data available	
benzyl salicylate	No data available		No data available	
isobutane	No data available		No data available	
4-tert-butylcyclohexyl acetate	No data available		No data available	
pentyl salicylate	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	
trimethyloctadecylammonium chloride	No data available		No data available	
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	No evidence for mutagenicity	Method not given	No data available	

Carcinogenicity

Ingredient(s)	Effect
butane	No data available
propane	No data available
alpha-hexylcinnamaldehyde	No data available
benzyl salicylate	No data available
isobutane	No data available
4-tert-butylcyclohexyl acetate	No data available
pentyl salicylate	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
trimethyloctadecylammonium chloride	No data available
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	No evidence for carcinogenicity, negative test results

Toxicity for reproduction

Ingredient(s)	Endpoint	Specific effect	Value (mg/kg bw/d)	Species	Method	Exposure time	Remarks and other effects reported
butane			No data available				
propane			No data available				
alpha-hexylcinnamaldehyde			No data available				
benzyl salicylate			No data available				
isobutane			No data available				
4-tert-butylcyclohexyl acetate			No data available				
pentyl salicylate			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				

trimethyloctadecylammonium chloride			No data available				
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)			No data available				No evidence for reproductive toxicity No evidence for teratogenic effects

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
butane		No data available				
propane		No data available				
alpha-hexylcinnamaldehyde		No data available				
benzyl salicylate		No data available				
isobutane		No data available				
4-tert-butylcyclohexyl acetate		No data available				
pentyl salicylate		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				
trimethyloctadecylammonium chloride		No data available				
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)		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
butane		No data available				
propane		No data available				
alpha-hexylcinnamaldehyde		No data available				
benzyl salicylate		No data available				
isobutane		No data available				
4-tert-butylcyclohexyl acetate		No data available				
pentyl salicylate		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				
trimethyloctadecylammonium chloride		No data available				
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)		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
butane		No data available				
propane		No data available				
alpha-hexylcinnamaldehyde		No data available				
benzyl salicylate		No data available				
isobutane		No data				

		available				
4-tert-butylcyclohexyl acetate		No data available				
pentyl salicylate		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				
trimethyloctadecylammonium chloride		No data available				
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)		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
butane			No data available					
propane			No data available					
alpha-hexylcinnamaldehyde			No data available					
benzyl salicylate			No data available					
isobutane			No data available					
4-tert-butylcyclohexyl acetate			No data available					
pentyl salicylate			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					
trimethyloctadecylammonium chloride			No data available					
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
butane	No data available
propane	No data available
alpha-hexylcinnamaldehyde	No data available
benzyl salicylate	No data available
isobutane	No data available
4-tert-butylcyclohexyl acetate	No data available
pentyl salicylate	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
trimethyloctadecylammonium chloride	No data available
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
butane	No data available
propane	No data available
alpha-hexylcinnamaldehyde	No data available
benzyl salicylate	No data available
isobutane	No data available

4-tert-butylcyclohexyl acetate	No data available
pentyl salicylate	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
trimethyloctadecylammonium chloride	No data available
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	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)
butane		No data available			
propane		No data available			
alpha-hexylcinnamaldehyde		No data available			
benzyl salicylate		No data available			
isobutane		No data available			
4-tert-butylcyclohexyl acetate		No data available			
pentyl salicylate		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
trimethyloctadecylammonium chloride	LC_{50}	0.064	*Brachydanio rerio*	OECD 203, semi-static	96
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	LC_{50}	0.28	*Lepomis macrochirus*	OECD 203 (EU C.1)	96

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
butane		No data available			
propane		No data available			
alpha-hexylcinnamaldehyde		No data available			
benzyl salicylate		No data available			
isobutane		No data available			
4-tert-butylcyclohexyl acetate		No data available			

pentyl salicylate		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
trimethyloctadecylammonium chloride	EC_{50}	0.037	*Daphnia magna Straus*	OECD 202, static	48
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	EC_{50}	0.126	*Daphnia magna Straus*	OECD 202 (EU C.2)	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
butane		No data available			
propane		No data available			
alpha-hexylcinnamaldehyde		No data available			
benzyl salicylate		No data available			
isobutane		No data available			
4-tert-butylcyclohexyl acetate		No data available			
pentyl salicylate		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
trimethyloctadecylammonium chloride	$E_r C_{50}$	0.047	*Pseudokirchneriella subcapitata*	OECD 201, static	72
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	EC_{50}	0.003	*Pseudokirchneriella subcapitata*	OECD 201 (EU C.3)	72

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
butane		No data available			
propane		No data available			
alpha-hexylcinnamaldehyde		No data available			
benzyl salicylate		No data available			
isobutane		No data available			
4-tert-butylcyclohexyl acetate		No data available			
pentyl salicylate		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			
trimethyloctadecylammonium chloride		No data available			
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)		No data available			

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
butane		No data available			
propane		No data available			
alpha-hexylcinnamaldehyde		No data			

		available			
benzyl salicylate		No data available			
isobutane		No data available			
4-tert-butylcyclohexyl acetate		No data available			
pentyl salicylate		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			
trimethyloctadecylammonium chloride		No data available			
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	EC_{20}	0.97	*Activated sludge*	OECD 209	3 hour(s)

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
butane		No data available				
propane		No data available				
alpha-hexylcinnamaldehyde		No data available				
benzyl salicylate		No data available				
isobutane		No data available				
4-tert-butylcyclohexyl acetate		No data available				
pentyl salicylate		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				
trimethyloctadecylammonium chloride	NOEC	0.032	*Pimephales promelas*	Method not given	28 day(s)	Lethal effects
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)		No data available				

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
butane		No data available				
propane		No data available				
alpha-hexylcinnamaldehyde		No data available				
benzyl salicylate		No data available				
isobutane		No data available				
4-tert-butylcyclohexyl acetate		No data available				
pentyl salicylate		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				
trimethyloctadecylammonium chloride	NOEC	0.007	*Daphnia magna*	OECD 211	21 day(s)	Lethal effects
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)		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
butane		No data available				
propane		No data available				
alpha-hexylcinnamaldehyde		No data available				
benzyl salicylate		No data available				
isobutane		No data available				
4-tert-butylcyclohexyl acetate		No data available				
pentyl salicylate		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				
trimethyloctadecylammonium chloride		No data available				
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)		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
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)		No data available				

Terrestrial toxicity - plants, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)		No data available				

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)		No data available				

Terrestrial toxicity - beneficial insects, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)		No data available				

Terrestrial toxicity - soil bacteria, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)		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
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	No data available			

Abiotic degradation - hydrolysis, if available:

Ingredient(s)	Half-life time in fresh water	Method	Evaluation	Remark
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	No data available			

Abiotic degradation - other processes, if available:

Ingredient(s)	Type	Half-life time	Method	Evaluation	Remark
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)		No data available			

Biodegradation

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT_{50}	Method	Evaluation
butane					Readily biodegradable
propane					Readily biodegradable
alpha-hexylcinnamaldehyde					Not readily biodegradable.
benzyl salicylate				OECD 301F	Readily biodegradable
isobutane					Readily biodegradable
4-tert-butylcyclohexyl acetate				OECD 301B	Readily biodegradable
pentyl salicylate					Not 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
trimethyloctadecylammonium chloride	Activated sludge, aerobe	BOD removal	18% in 28 day(s)	OECD 301D	Not readily biodegradable.
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)		Oxygen depletion	> 60%	OECD 301D	Readily biodegradable

Ready biodegradability - anaerobic and marine conditions, if available:

Ingredient(s)	Medium & Type	Analytical method	DT_{50}	Method	Evaluation
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)					No data available

Degradation in relevant environmental compartments, if available:

Ingredient(s)	Medium & Type	Analytical method	DT_{50}	Method	Evaluation
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)					No data available

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
butane	No data available			
propane	No data available			
alpha-hexylcinnamaldehyde	No data available			
benzyl salicylate	No data available			
isobutane	No data available			
4-tert-butylcyclohexyl acetate	No data available			
pentyl salicylate	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	
trimethyloctadecylammonium chloride	3.61	OECD 107	No bioaccumulation expected	at pH 7
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and	-0.71 - +0.75	Method not given	No bioaccumulation expected	

2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)				

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
butane	No data available				
propane	No data available				
alpha-hexylcinnamaldehyde	No data available				
benzyl salicylate	No data available				
isobutane	No data available				
4-tert-butylcyclohexyl acetate	No data available				
pentyl salicylate	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	
trimethyloctadecylammonium chloride	70.8		QSAR		
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	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
butane	No data available				
propane	No data available				
alpha-hexylcinnamaldehyde	No data available				
benzyl salicylate	No data available				
isobutane	No data available				
4-tert-butylcyclohexyl acetate	No data available				
pentyl salicylate	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
trimethyloctadecylammonium chloride	No data available				
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	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: 16 05 04* - gases in pressure containers (including halons) 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: 1950

14.2 UN proper shipping name:
Aerosols

14.3 Transport hazard class(es):
Transport hazard class (and subsidiary risks): 2.1

14.4 Packing group:

14.5 Environmental hazards:
Environmentally hazardous: No
Marine pollutant: No

14.6 Special precautions for user: None known.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code: The product is not transported in bulk tankers.

Other relevant information:

ADR
Classification code: 5F
Tunnel restriction code: (D)

IMO/IMDG
EmS: F-D, S-U

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

SECTION 15: Regulatory information

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

EU regulations:
• Regulation (EC) No. 1907/2006 - REACH
• Regulation (EC) No 1272/2008 - CLP
• Directive 75/324/EEC on aerosol dispensers
• substances identified as having endocrine disrupting properties in accordance with the criteria set out in Delegated Regulation (EU) 2017/2100 or Regulation (EU) 2018/605
• 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.

Seveso - Classification: P3a - FLAMMABLE AEROSOLS

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: MS1005438 **Version:** 01.0 **Revision:** 2022-12-01

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:
• H220 - Extremely flammable gas.
• H226 - Flammable liquid and vapour.
• H280 - Contains gas under pressure; may explode if heated.
• H301 - Toxic if swallowed.
• H302 - Harmful if swallowed.
• H304 - May be fatal if swallowed and enters airways.
• H310 - Fatal in contact with skin.
• H311 - Toxic in contact with skin.
• H314 - Causes severe skin burns and eye damage.
• H315 - Causes skin irritation.
• H317 - May cause an allergic skin reaction.
• H318 - Causes serious eye damage.
• H320 - Causes eye irritation.
• H330 - Fatal if inhaled.
• 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.
• H412 - Harmful to aquatic life with long lasting effects.
• EUH071 - Corrosive to the respiratory tract.

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

End of Safety Data Sheet