



SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Issuing Date: 28-Nov-2022

Revision Date: 28-Nov-2022

Revision Number 1

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

1.1. Product identifier

Product Identifier C-90894772-001_RET_CLPR7_EUR
Product Name Febreze/ Ambi Pur - Bathroom Air Freshener - Blossom & Breeze
Product Form Mixture
Pure substance/mixture Mixture

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

Recommended use Intended for general public
Uses advised against No information available
Main user category SU 21 - Consumer uses: Private households (= general public = consumers)
Product category Non-Energized & Continuous
Use category PC3 - Air care products

1.3. Details of the supplier of the safety data sheet

Supplier	Manufacturer
Procter & Gamble UK Brooklands, Weybridge, Surrey, KT13 0XP, UK Tel: 01932 896000 Fax: 01932 896200	Zobe Bulgaria Eood Plovdiv district, Industrial zone Rakovski warehouse 2 Bulgaria, +359 2 9154 409, E-mail: poison_centre@mail.orbitel.bg; http://www.pirogov.bg
P&G DCE bvba/spri-Belgium Dist. Div., Temselaan 100, B-1853 Strombeek-Bever, Belgium (IE) 1800 535 119	

For further information, please contact

E-mail address pgsds.im@pg.com

1.4. Emergency telephone number

Emergency Telephone (UK) Emergency Tel: 0800 328 8304 (IRL) Emergency Tel: 1800 509 497

(IRL) Poisons information: for information or to report a poisoning incident contact The National Poisons Information Centre 01 8092166 (8.00 a.m. to 10.00 p.m. 7 days a week)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Skin corrosion/irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 2 - (H319)
Skin sensitization	Category 1 - (H317)
Chronic aquatic toxicity	Category 2 - (H411)

2.2. Label elements



Signal word
Warning

Hazard statements

H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H411 - Toxic to aquatic life with long lasting effects

Precautionary Statements - EU (§28, 1272/2008)

P102 - Keep out of reach of children
P305 + P351 - IF IN EYES: Rinse cautiously with water for several minutes
P501 - Dispose of contents/container to an appropriate local waste system
P312 - Call a POISON CENTRE/doctor if you feel unwell
P302 + P352 - IF ON SKIN: Wash with plenty of water

2.3. Other hazards

No information available.

Endocrine Disruptor Information There are no substances contained at or above the regulated value for declaration of >0.1% that fall under the definition of confirmed endocrine disruptors of any EU regulation.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Chemical name	CAS No	Weight-%	REACH registration number	EC No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
Linalool	78-70-6	5 - 10	01-21194740 16-42	201-134-4	Skin Irrit. 2(H315) Skin Sens. 1B(H317) Eye Irrit. 2(H319)	-	-	-
Pentamethylheptenone	81786-73-4	5 - 10	No data available	279-822-9	Skin Sens. 1B(H317) Aquatic Chronic 2(H411)	-	-	-
Benzyl Acetate	140-11-4	5 - 10	01-21196382 72-42	205-399-7	Aquatic Chronic 3(H412)	-	-	-
4-tert-Butylcyclohexyl Acetate	32210-23-4	5 - 10	01-21199762 86-24	250-954-9	Skin Sens. 1B(H317)	-	-	-
2-T-Butylcyclohexyl Acetate	20298-69-5	5 - 10	01-21199707 13-33	243-718-1	Aquatic Chronic	-	-	-

					2(H411)			
2,6-Dimethyl-7-Octen-2-ol	18479-51-1	5 - 10	No data available	242-359-8	Skin Irrit. 2(H315)	-	-	-
Anisaldehyde	123-11-5	1 - 5	01-21199771 01-43	204-602-6	Aquatic Chronic 3(H412)	-	-	-
Trimethylhexyl Acetate	58430-94-7	1 - 5	No data available	261-245-9	Skin Irrit. 2(H315) Aquatic Chronic 2(H411)	-	-	-
Ethyl 2,2-Dimethylhydrocinnamal	67634-15-5	1 - 5	01-21207587 96-34	266-819-2	Skin Irrit. 2(H315) Skin Sens. 1B(H317) Aquatic Acute 1(H400) Aquatic Chronic 2(H411)	-	1	-
Ionone	79-77-6	1 - 5	01-21194499 21-34	201-224-3	Aquatic Chronic 2(H411)	-	-	-
Delta-Damascone	57378-68-4	1 - 5	01-21195351 22-53	260-709-8	Acute Tox. 4 (Oral)(H302) Skin Irrit. 2(H315) Skin Sens. 1A(H317) Aquatic Acute 1(H400) Aquatic Chronic 1(H410)	-	-	-
2,4-Dimethyl-3-Cyclohexene Carboxaldehyde	68039-49-6	1 - 5	01-21199823 84-28	268-264-1	Skin Irrit. 2(H315) Skin Sens. 1(H317) Aquatic Chronic 2(H411)	-	-	-
Geranodyle	42822-86-6	1 - 5	No data available	255-953-7	Eye Dam. 1(H318)	-	-	-
Citrus Nobilis Peel Oil	84929-38-4	1 - 5	No data available	284-521-0	Flam. Liq. 3(H226) Asp. Tox. 1(H304) Skin Irrit. 2(H315) Skin Sens. 1(H317) Repr. 2(H361) Aquatic Chronic 2(H411)	-	-	-
Decanal	112-31-2	1 - 5	01-21199677 71-26	203-957-4	Eye Irrit. 2(H319) Aquatic Chronic 3(H412)	-	-	-
Isopropylphenylbuta	125109-85-5	1 - 5	01-00000159	412-050-4	Aquatic	-	-	-

nal			36-60		Chronic 2(H411)			
Isoamyl Allylglycolate	67634-00-8	1 - 5	No data available	266-803-5	Acute Tox. 4 (Oral)(H302) Skin Irrit. 2(H315) Acute Tox. 2 (Inhalation:d ust,mist)(H3 30)	-	-	-
Cyclamen Aldehyde	103-95-7	1 - 5	01-21199705 82-32	203-161-7	Skin Irrit. 2(H315) Skin Sens. 1B(H317) Aquatic Chronic 3(H412)	-	-	-
Undecylenal	112-45-8	<1	01-21199809 59-11	203-973-1	Skin Sens. 1B(H317) Aquatic Chronic 3(H412)	-	-	-
3-(4-isobutyl-2-meth ylphenyl)propanal	1637294-12- 2	<1	01-21201031 56-71	-	Skin Irrit. 2(H315) Skin Sens. 1B(H317) Aquatic Chronic 2(H411)	-	-	-
5,6,7-trimethylocta-2 ,5-dien-4-one	358331-95-0	<1	01-00000190 66-71	451-330-0	Skin Irrit. 2(H315) Skin Sens. 1B(H317)	-	-	-
Lauraldehyde	112-54-9	<1	01-21199694 41-33	203-983-6	Skin Irrit. 2(H315) Skin Sens. 1B(H317) Eye Irrit. 2(H319)	-	-	-
Isobutenyl Methyltetrahydropyr an	16409-43-1	<1	01-21199763 00-42	240-457-5	Skin Irrit. 2(H315) Eye Irrit. 2(H319) Repr. 2(H361f)	-	-	-
cis-hex-3-en-1-yl Methyl Carbonate	67633-96-9	<1	No data available	266-797-4	Skin Sens. 1B(H317)	-	-	-
Coumarin	91-64-5	<1	01-21199493 00-45	202-086-7	Acute Tox. 4 (Oral)(H302) Skin Sens. 1B(H317)	-	-	-
Methylundecanal	110-41-8	<1	01-21199694 43-29	203-765-0	Skin Irrit. 2(H315) Skin Sens. 1B(H317) Aquatic Acute 1(H400) Aquatic Chronic 1(H410)	-	1	1
Undecenal	1337-83-3	<1	No data available	215-656-5	Skin Sens. 1B(H317)	-	10	-

					Aquatic Acute 1(H400) Aquatic Chronic 2(H411)			
4,4a,5,9b-Tetrahydroindeno[1,2-d]-1,3-Dioxin	18096-62-3	<1	01-21207601 70-66	241-997-4	Repr. 2(H361)	-	-	-
Cyclopropanemethanol, 1-Methyl-2-[[1,2,2-trimethylbicyclohex-3-yl]methyl]-	198404-98-7	<1	01-00000174 24-73	427-900-1	Aquatic Acute 1(H400) Aquatic Chronic 1(H410)	-	-	-
Citronellol	106-22-9	<1	01-21194539 95-23	203-375-0	Skin Irrit. 2(H315) Skin Sens. 1B(H317) Eye Irrit. 2(H319)	-	-	-
trans-Menthone	89-80-5	<1	No data available	201-941-1	Skin Sens. 1B(H317) Skin Irrit. 2(H315) Aquatic Chronic 3(H412) Acute Tox. 4 (Oral)(H302)	-	-	-

Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate
No information available

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (Regulation (EC) No. 1907/2006 (REACH), Article 59).

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance.
Inhalation	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. (Call a physician if symptoms occur).
Eye contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.
Skin contact	IF ON SKIN: Wash with plenty of soap and water. Remove and isolate contaminated clothing and shoes. Get medical attention if symptoms occur. Discontinue use of product.
Ingestion	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Call a physician or poison control center immediately.
Self-protection of the first aider	Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

4.2. Most important symptoms and effects, both acute and delayed

Symptoms	Coughing and/ or wheezing. Redness. Swelling of tissue. Itching. Drowsiness. Dizziness. Sneezing. Dryness. Pain. Blurred vision. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Excessive secretion. Shortness of breath. Headache.
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4.3. Indication of any immediate medical attention and special treatment needed

Note to physicians	May cause sensitization in susceptible persons. Treat symptomatically.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media Dry chemical. Alcohol resistant foam. Carbon dioxide (CO2).
Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.
Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical None in particular.

5.3. Advice for firefighters

Special protective equipment for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.
For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Methods for containment Scoop absorbed substance into closing containers.
Methods for cleaning up Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Small quantities of liquid spill: Large Spills: contain released substance, pump into suitable containers. This material and its container must be disposed of in a safe way, and as per local legislation.
Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Avoid contact with skin. Avoid contact with eyes. Use personal protection equipment. Do not eat, drink or smoke when using this product. Use only with adequate ventilation. People suffering from perfume sensitivity should be cautious when using this product. Air Fresheners do not replace good hygiene practices.
General hygiene considerations Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Avoid contact with skin, eyes or clothing.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep/store only in original container. Keep tightly closed in a dry and cool place.

7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

Chemical name	European Union	Austria	Belgium	Bulgaria	Croatia
Benzyl Acetate	-	-	TWA: 10 ppm	-	-

			TWA: 62 mg/m ³		
Chemical name	Cyprus	Czech Republic	Denmark	Estonia	Finland
Benzyl Acetate	-	-	TWA: 10 ppm TWA: 61 mg/m ³	-	-
Chemical name	Ireland	Italy	Italy REL	Latvia	Lithuania
Benzyl Acetate	TWA: 10 ppm STEL: 30 ppm	-	TWA: 10 ppm TWA: 61 mg/m ³	TWA: 5 mg/m ³	TWA: 5 mg/m ³
Chemical name	Portugal	Romania	Slovakia	Slovenia	Spain
Benzyl Acetate	TWA: 10 ppm	TWA: 8 ppm TWA: 50 mg/m ³ STEL: 13 ppm STEL: 80 mg/m ³	-	-	TWA: 10 ppm TWA: 62 mg/m ³
Chemical name	Sweden	Switzerland	United Kingdom	Israel - Occupational Exposure Limits - TWAs	Turkey
Benzyl Acetate	-	-	-	10ppmTWA	-

Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL) Long term.

Chemical name	Worker - dermal, long-term - systemic	Worker - inhalative, long-term - systemic	Worker - dermal, long-term - local	Worker - inhalative, long-term - local
Linalool	3.5 mg/kg bw/day	24.58 mg/m ³	3 mg/cm ²	-
Benzyl Acetate	2.5 mg/kg bw/day	0.009 mg/l	-	-
Anisaldehyde	3.33 mg/kg bw/day	5.88 mg/m ³	-	-
Ionone	6 mg/kg bw/day	12.7 mg/m ³	-	-
Citrus Nobilis Peel Oil	6.67 mg/kg bw/day	23.3 mg/m ³	-	-
Decanal	7.05 mg/kg bw/day	24.86 mg/m ³	17.62 mg/cm ²	62.14 mg/m ³
Isopropylphenylbutanal	1.4 mg/kg bw/d	4.93 mg/m ³	-	8.82 mg/m ³
Isoamyl Allylglycolate	1.4 mg/kg bw/day	4.93 mg/m ³	-	-
Cyclamen Aldehyde	0.35 mg/kg bw/day	1.23 mg/m ³	-	-
3-(4-isobutyl-2-methylphenyl)propanal	0.83 mg/kg bw/day	2.47 mg/m ³	1785.7 mg/m ²	-
Lauraldehyde	14.1 mg/kg bw/d	49.7 mg/m ³	0.00057 mg/cm ²	-
Coumarin	0.79 mg/kg bw/d	6.78 mg/m ³	-	-
Methylundecanal	10.46 mg/kg bw/day	36.89 mg/m ³	35.7 mg/cm ²	92.21 mg/m ³
4,4a,5,9b-Tetrahydroindeno[1,2-d]-1,3-Dioxin	0.12 mg/kg bw/day	0.43 mg/m ³	-	-
Citronellol	327.4 mg/kg bw/day	161.6 mg/m ³	-	10 mg/m ³
trans-Menthone	11.2 mg/kg bw/d	39.5 mg/m ³	-	-

Chemical name	Consumer - oral, long-term - local	Consumer - inhalative, long-term - local	Consumer - dermal, long-term - local
Linalool	-	-	1.5 mg/cm ²
Decanal	-	15.32 mg/m ³	8.81 mg/cm ²
Isopropylphenylbutanal	-	2.17 mg/m ³	-
3-(4-isobutyl-2-methylphenyl)propanal	-	-	892.9 mg/m ²
Lauraldehyde	-	-	0.00028 mg/cm ²
Methylundecanal	-	22.74 mg/m ³	17.86 mg/cm ²
Citronellol	-	10 mg/m ³	-

Chemical name	Consumer - oral, long-term - systemic	Consumer - inhalative, long-term - systemic	Consumer - dermal, long-term - systemic
Linalool	2.49 mg/kg bw/day	4.33 mg/m ³	1.25 mg/kg bw/day
Benzyl Acetate	1.3 mg/kg bw/day	0.022 mg/l	1.3 mg/kg bw/day
Anisaldehyde	1 mg/kg bw/day	1.74 mg/m ³	2 mg/kg bw/day
Ionone	1.8 mg/kg bw/day	3.1 mg/m ³	3.6 mg/kg bw/day

Citrus Nobilis Peel Oil	3.33 mg/kg bw/day	5.8 mg/m ³	3.33 mg/kg bw/day
Decanal	3.52 mg/kg bw/day	6.13 mg/m ³	3.52 mg/kg bw/day
Isopropylphenylbutanal	0.5 mg/kg bw/d	0.87 mg/m ³	0.5 mg/kg bw/d
Isoamyl Allylglycolate	0.5 mg/kg bw/day	0.87 mg/m ³	0.5 mg/kg bw/day
Cyclamen Aldehyde	0.13 mg/kg bw/day	0.22 mg/m ³	0.13 mg/kg bw/day
3-(4-isobutyl-2-methylphenyl)propanal	0.25 mg/kg bw/day	0.435 mg/m ³	0.42 mg/kg bw/day
Lauraldehyde	7 mg/kg bw/d	12.3 mg/m ³	7 mg/kg bw/d
Coumarin	0.39 mg/kg bw/d	1.69 mg/m ³	0.39 mg/kg bw/d
Methylundecanal	5.23 mg/kg bw/day	9.1 mg/m ³	5.23 mg/kg bw/day
4,4a,5,9b-Tetrahydroindeno[1,2-d]-1,3-Dioxin	0.044 mg/kg bw/day	0.076 mg/m ³	0.044 mg/kg bw/day
Citronellol	13.8 mg/kg bw/day	47.8 mg/m ³	196.4 mg/kg bw/day
trans-Menthone	4 mg/kg bw/d	5.92 mg/m ³	4 mg/kg bw/d

Derived No Effect Level (DNEL) Short term.

Chemical name	Worker - dermal, short-term - systemic	Worker - inhalative, short-term - systemic	Worker - dermal, short-term - local	Worker - inhalative, short-term - local
Linalool	-	-	-	3 mg/cm ²
Citrus Nobilis Peel Oil	-	-	-	0,1858 mg/cm ²
Decanal	14.1 mg/kg bw/day	49.71 mg/m ³	14.1 mg/kg bw/day	35.24 mg/cm ²
Isopropylphenylbutanal	6 mg/kg bw/d	21.16 mg/m ³	6 mg/kg bw/d	-
Methylundecanal	100 mg/kg bw/day	352.63 mg/m ³	100 mg/kg bw/day	71.43 mg/cm ²
Citronellol	-	-	-	2.95 mg/cm ²

Chemical name	Consumer - inhalative, short-term - local	Consumer - dermal, short-term - local
Linalool	-	1.5 mg/cm ²
Citrus Nobilis Peel Oil	-	0,0929 mg/cm ²
Decanal	30.65 mg/m ³	17.62 mg/cm ²
Isopropylphenylbutanal	13.04 mg/m ³	-
Methylundecanal	217.39 mg/m ³	35.71 mg/cm ²
Citronellol	10 mg/m ³	2.95 mg/cm ²

Chemical name	Consumer - oral, short-term - systemic	Consumer - inhalative, short-term - systemic	Consumer - dermal, short-term - systemic
Decanal	7.05 mg/kg bw/day	12.26 mg/m ³	7.05 mg/kg bw/day
Isopropylphenylbutanal	3 mg/kg bw/d	5.22 mg/m ³	3 mg/kg bw/d
Methylundecanal	25 mg/kg bw/day	86.96 mg/m ³	50 mg/kg bw/day

Predicted No Effect Concentration (PNEC)

Chemical name	Fresh Water	Marine water	Intermittent release
Linalool	0.2 mg/L	0.02 mg/L	2 mg/L
Benzyl Acetate	0.018 mg/L	0.002 mg/L	0.04 mg/L
4-tert-Butylcyclohexyl Acetate	0.053 mg/L	0.053 mg/L	0.053 mg/L
2-T-Butylcyclohexyl Acetate	0.057 mg/L	0.006 mg/L	-
Anisaldehyde	0.013 mg/L	0.0013 mg/L	0.8111 mg/L
Ionone	0.004 mg/L	0 mg/L	0.04 mg/L
Citrus Nobilis Peel Oil	0.0054 mg/L	0,00054 mg/L	0.00577 mg/L
Decanal	0.00117 mg/L	0.000117 mg/L	0.0117 mg/L
Isopropylphenylbutanal	0.0142 mg/L	0.0226 mg/L	0.00142 mg/L
Isoamyl Allylglycolate	0.00077 mg/L	0.000077 mg/L	0.0077 mg/L
Cyclamen Aldehyde	0.0088 mg/L	0.00088 mg/L	0.014
3-(4-isobutyl-2-methylphenyl)propanal	0.0064 mg/L	0.00064 mg/L	0.0101 mg/L
Lauraldehyde	0.0035 mg/L	0.00035 mg/L	0.035 mg/L
Coumarin	0.019 mg/L	0.0019 mg/L	0.0142 mg/L
Methylundecanal	0.66 mg/L	0.000066 mg/L	0.0018 mg/L
Citronellol	0.002 mg/L	0 mg/L	0.024 mg/L
trans-Menthone	0.0129 mg/L	0.00129 mg/L	0.129 mg/L

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment plant	Soil	Air	Oral
Linalool	2.22 mg/kg sediment dw	0.222 mg/kg sediment dw	10 mg/L	0.327 mg/kg soil dw	-	-
Benzyl Acetate	0.526 mg/kg sediment dw	0.053 mg/kg sediment dw	8.55 mg/L	0.094 mg/kg soil dw	-	-
4-tert-Butylcyclohexyl Acetate	2.01 mg/kg sediment dw	0.21 mg/kg sediment dw	12.2 mg/L	0.42 mg/kg soil dw	-	-
2-T-Butylcyclohexyl Acetate	7.62 mg/kg sediment dw	0.762 mg/kg sediment dw	10 mg/L	4.4 mg/kg soil dw	-	-
Anisaldehyde	0.06 mg/kg sediment dw	0.006 mg/kg sediment dw	8.5 mg/L	0.004 mg/kg soil dw	-	-
Ionone	0.151 mg/kg sediment dw	0.015 mg/kg sediment dw	1 mg/L	0.051 mg/kg soil dw	-	-
Citrus Nobilis Peel Oil	1.3 mg/kg sediment dw	0.13 mg/kg sediment dw	2.1 mg/L	0.29 mg/kg soil dw	-	-
Decanal	0.097 mg/kg sediment dw	0.01 mg/kg sediment dw	3.16 mg/L	0.019 mg/kg soil dw	-	-
Isopropylphenylbutanal	1.1 mg/kg sediment dw	0.11 mg/kg sediment dw	3.2 mg/L	0.212 mg/kg soil dw	-	-
Isoamyl Allylglycolate	0.00893 mg/kg sediment dw	0.000893 mg/kg sediment dw	-	0.00133 mg/kg soil dw	-	-
Cyclamen Aldehyde	1.02 mg/kg sediment dw	0.102 mg/kg sediment dw	1 mg/L	0.199 mg/kg soil dw	-	-
3-(4-isobutyl-2-methylphenyl)propanal	1.3 mg/kg sediment dw	0.13 mg/kg sediment dw	1 mg/L	0.256 mg/kg soil dw	-	-
Lauraldehyde	1.41 mg/kg sediment dw	0.141 mg/kg sediment dw	10 mg/L	0.278 mg/kg soil dw	-	-
Coumarin	0.15 mg/kg sediment dw	0.015 mg/kg sediment dw	6.4 mg/L	0.018 mg/kg soil dw	-	-
Methylundecanal	0.265 mg/kg sediment dw	0.0265 mg/kg sediment dw	10 mg/L	0.0526 mg/kg soil dw	-	-
Citronellol	0.026 mg/kg sediment dw	0.003 mg/kg sediment dw	580 mg/L	0.004 mg/kg soil dw	-	-
trans-Menthone	0.129 mg/kg sediment dw	0.0129 mg/kg sediment dw	-	0.0182 mg/kg sediment dw	-	-

8.2. Exposure controls

Personal Protective Equipment

Eye/face protection

Wear safety glasses with side shields (or goggles).

Hand protection

Wear suitable gloves.

Skin and body protection

Wear suitable protective clothing.

Respiratory protection

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations

Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Avoid contact with skin, eyes or clothing.

Environmental exposure controls

Prevent that the undiluted product reaches surface waters.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Liquid
Color	clear
Odor	Pleasant (perfume)
Odor threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Melting point / freezing point	No data available	Not available. This property is not relevant for the safety and classification of this product
Initial boiling point and boiling range	> 150 °C	
Flammability		Not applicable. This property is not relevant for liquid product forms
Flammability Limit in Air		Not available. This property is not relevant for the safety and classification of this product
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Flash point	> 60 °C	Closed cup
Autoignition temperature	No data available	Not available. This property is not relevant for the safety and classification of this product
Decomposition temperature	No Data Available	Not available. This property is not relevant for the safety and classification of this product
pH	No data available	Not available. This property is not relevant for the safety and classification of this product
Dynamic viscosity	0 - 150 cP	
Water solubility	Insoluble in water	
Solubility(ies)	No Data Available	Not available. This property is not relevant for the safety and classification of this product
Partition coefficient	No Data Available	Not available. This property is not relevant for the safety and classification of this product
Vapor pressure	No Data Available	Not available. This property is not relevant for the safety and classification of this product
Relative density	0.91 - 0.99	
Relative vapor density	No data available	Not available. This property is not relevant for the safety and classification of this product
Particle characteristics		Not available. This property is not relevant for the safety and classification of this product
Particle Size	No information available	
Particle Size Distribution	No information available	

9.2. Other information

9.2.1. Information with regard to physical hazard classes
No information available

9.2.2. Other safety characteristics
No information available

Evaporation rate 0.01 - 0.09

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid None known based on information supplied.

10.5. Incompatible materials

Incompatible materials None known based on information supplied.

10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

SECTION 11: Toxicological information

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

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.

Eye contact Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.

Skin contact May cause sensitization by skin contact. Specific test data for the substance or mixture is not available. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. (based on components). Causes skin irritation.

Ingestion Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Itching. Rashes. Hives. Redness. May cause redness and tearing of the eyes.

Numerical measures of toxicity

Acute toxicity

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 12,195.00 mg/kg
ATEmix (inhalation-dust/mist) 0.359 mg/l

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Linalool	2790 mg/kg bodyweight (rat)	5610 mg/kg (rabbit)	21 mg/l/4h (rat)
Benzyl Acetate	4999 mg/kg (rat)	5001 mg/kg (rabbit)	-
Vertenex	3323 mg/kg (rat)	5001 mg/kg (rabbit)	-
cis-2-tert-Butylcyclohexyl acetate	4600 mg/kg (rat)	5001 mg/kg (rabbit)	-
Anisic Aldehyde	3210 mg/kg (rat)	5001 mg/kg (rabbit)	21 mg/l (rat)
lrival (IFF)	= 4250 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	-
Floralozone	5001 mg/kg (rat)	5001 mg/kg (rabbit)	-
trans-beta-Ionone	5331 mg/kg (rat)	5001 mg/kg (rat)	-
delta Damascone	1400 mg/kg (rat)	5001 mg/kg (rabbit)	-
2,4-Dimethyl-3-cyclohexene	-	5000 mg/kg (rabbit)	-

Carboxaldehyde			
Mandarin Oil	5001 mg/kg (rat)	5001 mg/kg (rabbit)	-
Decanal	= 3730 mg/kg (Rat)	= 5040 mg/kg (Rabbit)	-
Isopropylphenylbutanal	5001 mg/kg (rat)	5001 mg/kg (rat)	-
Allyl Amyl Glycolate	500 mg/kg (rat)	5001 mg/kg (rat)	0 mg/l/4h (rat)
Cyclamen Aldehyde	4999 mg/kg (rat)	5001 mg/kg (rat)	-
10-Undecenal	> 5 g/kg (Rat)	> 5000 mg/kg (Rabbit)	-
Nymphaeal (SNUR)	5001 mg/kg (rat)	5001 mg/kg (rat)	-
Dodecanal	//	//	//
Rose Oxide	= 4300 mg/kg (Rat)	-	-
Lifarome	5001 mg/kg (rat)	-	-
Coumarin	520 mg/kg bodyweight (rat)	= 293 mg/kg (Rat)	-
Undecanal, 2-methyl-	5001 mg/kg (rat)	8281 mg/kg (rabbit)	-
Indoflor	2001 mg/kg (rat)	5001 mg/kg (rat)	-
Cyclopropanemethanol, 1-Methyl-2-[[[1,2,2-trimethylbicyclohex-3yl]methyl]-	5001 mg/kg (rat)	5001 mg/kg (rat)	-
Citronellol	3450 mg/kg bodyweight (rat)	2650 mg/kg bodyweight (rabbit)	-
Menthone/Isomenthone	500 mg/kg (rat)	5001 mg/kg (rabbit)	-

Chemical name	Carcinogenicity	Species	Eye Damage	Species	Developmental toxicity	Species	Mutagenicity	Species
Linalool	-	-	Y (OECD 405)	-	-	-	-	-
Decanal	-	-	Y (EU Method B.5)	-	-	-	-	-
3-(4-isobutyl-2-methylphenyl)propanal	-	-	Y (OECD 405)	-	-	-	-	-
Lauraldehyde	-	-	Y (100%)	-	-	-	-	-
Citronellol	-	-	Y (OECD 405)	-	-	-	-	-

Chemical name	Reproductive toxicity	Species	Skin corrosion/irritation	Species	Sensitization	Species
Linalool	-	-	Y (OECD 404)	-	-	-
2-T-Butylcyclohexyl Acetate	-	-	Y (OECD 404)	-	-	-
Citrus Nobilis Peel Oil	-	-	Y(OECD 404)	-	-	-
Decanal	-	-	Y (OECD 404)	-	-	-
Isoamyl Allylglycolate	-	-	Y	-	-	-
Cyclamen Aldehyde	-	-	Y	-	-	-
3-(4-isobutyl-2-methylphenyl)propanal	-	-	Y (OECD 439)	-	-	-
Lauraldehyde	-	-	Y (100%)	-	-	-
Methylundecanal	-	-	Y	-	-	-
4,4a,5,9b-Tetrahydroindeno[1,2-d]-1,3-Dioxin	20 mg/kg bw/day (OECD 422)	-	-	-	-	-
Citronellol	-	-	Y (OECD 404)	-	-	-
trans-Menthone	-	-	Y	-	-	-

Chemical name	Skin sensitization	Species	STOT - single exposure	Target Organs	Species	STOT - repeated exposure	Target Organs	Species	Aspiration hazard
Linalool	Y (OECD	-	-	-	-	-	-	-	-

Chemical name	Skin sensitization	Species	STOT - single exposure	Target Organs	Species	STOT - repeated exposure	Target Organs	Species	Aspiration hazard
	429)								
4-tert-Butylcyclohexyl Acetate	Y (OECD 429)	-	-	-	-	-	-	-	-
Citrus Nobilis Peel Oil	Y (OECD 429)	-	-	-	-	-	-	-	-
Cyclamen Aldehyde	Y (OECD 429)	-	-	-	-	-	-	-	-
3-(4-isobutyl-2-methylphenyl)propanal	Y (OECD 429)	-	-	-	-	-	-	-	-
Lauraldehyde	Y (OECD 429)	-	-	-	-	-	-	-	-
cis-hex-3-en-1-yl Methyl Carbonate	Y (OECD 429)	-	-	-	-	-	-	-	-
Methylundecanal	Y (OECD 429)	-	-	-	-	-	-	-	-
Citronellol	Y (OECD 429)	-	-	-	-	-	-	-	-

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	Irritating to skin.
Serious eye damage/eye irritation	Causes serious eye irritation.
Respiratory or skin sensitization	May cause an allergic skin reaction.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.
Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties This product does not contain any known or suspected endocrine disruptors.

11.2.2. Other information

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Unknown aquatic toxicity

Contains 13.699 % of components with unknown hazards to the aquatic environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Linalool	156.7 mg/L (Desmodesmus subspicatus; 96 h)	27.8 mg/L (OECD 203; Oncorhynchus mykiss; 96 h)	> 100 mg/L (OECD 209; activated sludge; 3 h)	59 mg/L (OECD 202; Daphnia magna; 48 h)
Benzyl Acetate	110 mg/L (OECD 201; Desmodesmus subspicatus; 72 h)	4 mg/L (Oryzias latipes; 96 h)	855 mg/L (OECD 209; activated sludge; 3 h)	17 mg/L (OECD 202; Daphnia magna; 48 h)
Vertenex	22 mg/L (EU Method C.3; Desmodesmus subspicatus; 72 h)	8.6 mg/L (EU Method C.1; Cyprinus Carpio; semi-static; freshwater; criteria: mortality; 96 h)	302 mg/L (EU Method C.11; activated sludge of a predominantly domestic sewage; 3 h)	5.3 mg/L (OECD 202; Daphnia magna; 48 h)
cis-2-tert-Butylcyclohexyl acetate	4.2 mg/L (OECD 201; Desmodesmus subspicatus; 72 h)	5.6 mg/L (EU Method C.1; Danio rerio; 96 h)	-	17 mg/L (EU Method C.2; Daphnia magna; 48 h)
Anisic Aldehyde	68.4 mg/L (OECD 201; Pseudokirchneriella subcapitata; 72 h)	148.32 mg/L (DIN 38 412, part L15; Leuciscus idus; 96 h)	EC50: 850 mg/L (ISO 8192; activated sludge, domestic; 0.5 h)	82.8 mg/L (daphnia magna; 48 h)
Irival (IFF)	-	LC50: =7.7mg/L (96h, Pimephales promelas)	-	-
trans-beta-Ionone	22.15 mg/L (Desmodesmus subspicatus; 72 h)	5.09 mg/L (Pimephales promelas; 96 h)	100 - 200 mg/L (OECD 209; activated sludge; 3 h)	4.03 mg/L (OECD 202; Daphnia magna; 48 h)
Mandarin Oil	-	101 mg/L (OECD 203; Oncorhynchus mykiss; 96 h)	-	-
Decanal	4.5 mg/L (OECD 201; Pseudokirchneriella subcapitata; 72 h)	1.45 -1.75 mg/L (OECD 203; Oncorhynchus mykiss; 96 h)	70 mg/L (OECD 209; activated sludge of a predominantly domestic sewage; 3 h)	1.17 - 1.94 mg/L (OECD 202; daphnia magna; 48 h)
Allyl Amyl Glycolate	2.06 mg/L (Desmodesmus subspicatus or Pseudokirchneriella subcapitata; 96 h)	-	8.47 mg/L (OECD 209; activated sludge; 3 h)	5.09 mg/L (Daphnia; 48 h)
Cyclamen Aldehyde	4.3 mg/L (OECD 201; Pseudokirchneriella subcapitata; 72 h)	2.49 mg/L (96 h)	100 mg/L (OECD 209; activated sludge; 3 h)	1.4 mg/L (OECD 202; Daphnia magna; 48 h)
Nymphaeal (SNUR)	-	-	101 mg/L (OECD 209; synthetic sewage feed; 3 h)	-
Dodecanal	> 0.048 mg/L (OECD 201; Pseudokirchneriella subcapitata; 72 h)	2.6 mg/L (OECD 203; Oncorhynchus mykiss; 96 h)	> 16 mg/L (DIN 38412; Pseudomonas putida; 16 h)	-
Liffarome	3.7 mg/L (green algae; 96 h)	-	-	10.3 mg/L (Daphnia sp; 48 h)
Coumarin	1.452 mg/L (QSAR; 96 h)	2.94 mg/L (QSAR; fathead minnow; 96 h)	640 mg/L (ISO 8192; 3 h)	> 24.3 mg/L (ASTM E729-80; Daphnia magna; 48 h)
Undecanal, 2-methyl-	0.18 mg/L (OECD 201; Pseudokirchneriella subcapitata; 72 h)	0.35 mg/L (OECD 203; Oncorhynchus mykiss; 96 h)	-	0.21 mg/L (OECD 202; Daphnia magna; 48 h)
Undecenal	47.3 mg/L (OECD 201; Desmodesmus subspicatus; 72 h)	8.51 mg/L (OECD 203; Danio rerio; 96 h)	6.25 mg/L (Saccharomyces cerevisiae; 48 h)	3.147 mg/L (Daphnia magna; 48 h)

Indoflor	> 100 mg/L (OECD 201; Pseudokirchneriella subcapitata; 72 h)	> 100 mg/L (OECD 203; Danio rerio; 96 h)	-	-
Cyclopropanemethanol, 1-Methyl-2-[[1,2,2-trimethylbicyclohex-3yl]methyl]-	0.74 mg/L (OECD 201; Pseudokirchneriella subcapitata; 72 h)	1 mg/L (OECD 203; Cyprinus carpio; 96 h)	-	0.38 mg/L (OECD 202; Daphnia magna; 48 h)
Citronellol	2.4 mg/L (72 h)	14.66 mg/L (German standard DIN 38 412, part L15.; Leuciscus idus; 96 h)	> 10000 mg/L (German standard, DIN 38412 Part 27; Pseudomonas putida; 0.5 h)	17.48 mg/L (EU Directive 79/831/EEC, Annex V, part C.; Daphnia magna; 48 h)
Menthone/Isomenthone	-	13 mg/L (Pimephales promelas; 96 h)	-	12.905 mg/L (Daphnia magna; 48 h)

Chronic Toxicity

Chemical name	Toxicity to algae (NOEC or ECx)*	Toxicity to fish (NOEC or ECx)*	Toxicity to daphnia and other aquatic invertebrates (NOEC or ECx)*	Toxicity to Microorganisms (NOEC or ECx)*	Toxicity to other organisms
Linalool	-	< 3.5 mg/L (OECD 203; Oncorhynchus mykiss; 4 d)	25 mg/L (OECD 202; Daphnia magna; 2 d)	-	-
Benzyl Acetate	52 mg/L (OECD 201; Desmodesmus subspicatus; 3 d)	0.92 mg/L (Oryzias latipes; 28 d)	10 mg/L (OECD 202; Daphnia magna; 2 d)	-	-
4-tert-Butylcyclohexyl Acetate	6.8 mg/L (EU Method C.3; Desmodesmus subspicatus; 3 d)	-	-	-	-
2-T-Butylcyclohexyl Acetate	0.57 mg/L (OECD 201; Desmodesmus subspicatus; 3 d)	0.8 mg/L (OECD 210; Pimephales promelas; 33 d)	-	100 mg/L (OECD 301 F; activated sludge of a predominantly domestic sewage; 61 d)	-
Anisaldehyde	26.7 mg/L (OECD 201; Pseudokirchneriella subcapitata; 3 d)	100 mg/L (DIN 38 412, part L15; Leuciscus idus; 4 d)	0.71 mg/L (OECD 211; Daphnia magna; 21 d)	-	-
Ionone	-	3.47 mg/L (Pimephales promelas; 4 d)	-	-	-
Decanal	0.759 mg/L (OECD 201; Pseudokirchneriella subcapitata; 3 d)	-	0.588 mg/L (OECD 202; daphnia magna; 2 d)	31.6 mg/L (OECD 209; activated sludge of a predominantly domestic sewage; 0.125 d)	-
Cyclamen Aldehyde	0.72 mg/L (OECD 201; Pseudokirchneriella subcapitata; 4 d)	-	0.71 mg/L (OECD 211; Daphnia magna; 21 d)	-	-
3-(4-isobutyl-2-methylphenyl)propanal	0.123 mg/L (OECD 201; Desmodesmus subspicatus; 3 d)	0.489 mg/L (OECD 203; Danio rerio; 4 d)	0.71 mg/L (OECD 211; Daphnia magna; 21 d)	-	-
cis-hex-3-en-1-yl Methyl Carbonate	1.3 mg/L (green algae; 4 d)	-	-	-	-
Methylundecanal	0.089 mg/L (OECD 201; Pseudokirchneriella subcapitata; 3 d)	0.11 mg/L (OECD 203; Oncorhynchus mykiss; 4 d)	0.033 mg/L (OECD 211; Daphnia magna; 21 d)	100 mg/L (OECD 301F; activated sludge of a predominantly domestic sewage; 22 d)	-
4,4a,5,9b-Tetrahydroindeno[1,2-d]-1,3-Dioxin	>= 100 mg/L (OECD 201; Pseudokirchneriella subcapitata; 3 d)	-	-	-	-
Cyclopropanemethanol, 1-Methyl-2-[[1,2,2-trimethylbicyclohex-3yl]methyl]-	0.14 mg/L (OECD 201; Pseudokirchneriella subcapitata; 3 d)	0.055 mg/L (OECD 210; fish; 28 d)	0.15 mg/L (OECD 202; Daphnia magna; 2 d)	-	-
Citronellol	-	4.6 mg/L (German standard DIN 38 412, part L15.; Leuciscus idus; 4 d)	3.1 mg/L (EU Directive 79/831/EEC, Annex V, part C.; Daphnia magna; 2 d)	-	-
trans-Menthone	2.5 mg/L (OECD 201;	-	-	308 mg/L	-

	Green algae; 3 d)			(Pseudomonas citronellolis DSM 50332; 21 d)	
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12.2. Persistence and degradability

Persistence and degradability

Chemical name	Ready Biodegradation Test (OECD 301)	Abiotic Degradation Hydrolysis	Abiotic Degradation Photolysis	Biodegradation Other Tests
Linalool - 78-70-6	64.2% O ₂ ; OECD 301 D; 28 d	-	-	-
Benzyl Acetate - 140-11-4	100.9 %CO ₂ ; OECD 301 B; 28 d	-	-	-
Vertenex - 32210-23-4	75%CO ₂ ; EU Method C.4-C; 29 d	-	-	-
cis-2-tert-Butylcyclohexyl acetate - 20298-69-5	43%O ₂ ; OECD 301 F; 28 d	-	-	-
Anisic Aldehyde - 123-11-5	97%DOC; OECD 301 E; 6 d	-	-	-
trans-beta-Ionone - 79-77-6	70 - 80% O ₂ ; 28 d	-	-	-
Decanal - 112-31-2	78%O ₂ ; OECD 302 C; 28 d	-	-	-
Isopropylphenylbutanal - 125109-85-5	79%O ₂ ; OECD 301 F; 62 d; 74%O ₂ -28 d	-	-	-
Allyl Amyl Glycolate - 67634-00-8	78.12% CO ₂ ; OECD 301 B; 28 d	-	-	-
Cyclamen Aldehyde - 103-95-7	65.5% CO ₂ ; OECD 301 B; 28 d	-	-	-
Nymphaeal (SNUR) - 1637294-12-2	77% O ₂ ; OECD 302 C; 60 d	-	-	-
Dodecanal - 112-54-9	73% O ₂ ; OECD 301 F	-	-	-
Liffarome - 67633-96-9	96 - 105%O ₂ ; OECD 301 C; 28 d	-	-	-
Coumarin - 91-64-5	90% O ₂ ; OECD 301 F; 85% (10 d)	-	-	-
Undecanal, 2-methyl- - 110-41-8	68%O ₂ ; OECD 301 F; 22 d	-	-	-
Undecenal - 1337-83-3	50%; 21 d	-	-	-
Indoflor - 18096-62-3	5% O ₂ ; 28 d	-	-	-
Cyclopropanemethanol, 1-Methyl-2-[[1,2,2-trimethylbicyclohex-3-yl]methyl]- - 198404-98-7	0%O ₂ ; OECD 301 F; 38 d	-	-	-
Citronellol - 106-22-9	80 - 90% O ₂ ; 28 d	-	-	-
Menthone/Isomenthone - 89-80-5	1.13%; 21 d	-	-	-

12.3. Bioaccumulative potential

Bioaccumulation

There is no data for this product.

Component Information

Chemical name	Partition coefficient
Linalool	2.9
Benzyl Acetate	1.96
4-tert-Butylcyclohexyl Acetate	4.8
2-T-Butylcyclohexyl Acetate	4.8
Anisaldehyde	1.56
Trimethylhexyl Acetate	4.6
Ionone	4
	1.903
Decanal	3.8
Isopropylphenylbutanal	3.8
	3.1
Isoamyl Allylglycolate	1.96
Cyclamen Aldehyde	3.4
Undecylenal	4.672
3-(4-isobutyl-2-methylphenyl)propanal	3.7
Lauraldehyde	4.9
Isobutenyl Methyltetrahydropyran	3.3

cis-hex-3-en-1-yl Methyl Carbonate	3
Methylundecanal	4.9
4,4a,5,9b-Tetrahydroindeno[1,2-d]-1,3-Dioxin	1.76
Cyclopropanemethanol, 1-Methyl-2-[[1,2,2-trimethylbicyclohex-3yl]methyl]-	4.8
Citronellol	3.41
trans-Menthone	2.295
	1.951
	3.05

Chemical name	Octanol/water partition coefficient	Bioconcentration factor (BCF)
Linalool	2.9	-
Benzyl Acetate	1.96	8
4-tert-Butylcyclohexyl Acetate	4.8 (OECD 117)	334.6 L/kg
2-T-Butylcyclohexyl Acetate	4.8 (OECD 117)	156 L/kg (OECD 305)
Anisaldehyde	1.56 (OECD 107)	-
Ionone	4	202.4 L/kg
Citrus Nobilis Peel Oil	4.27 - 4.88	-
Decanal	3.8 (OECD 117)	190 L/kg
Isopropylphenylbutanal	3.1 (OECD 117)	-
Isoamyl Allylglycolate	1.96	-
Cyclamen Aldehyde	3.4 (OECD 117)	155 L/kg
3-(4-isobutyl-2-methylphenyl)propanal	3.7 (OECD 117)	59.4 L/kg
Lauraldehyde	4.9	-
cis-hex-3-en-1-yl Methyl Carbonate	3 (OECD 117)	-
Coumarin	1.51	-
Methylundecanal	4.9 (OECD 117)	2917 L/kg
Undecenal	4.04	9.1 L/kg
4,4a,5,9b-Tetrahydroindeno[1,2-d]-1,3-Dioxin	1.76 (OECD 117)	-
Cyclopropanemethanol, 1-Methyl-2-[[1,2,2-trimethylbicyclohex-3yl]methyl]-	4.8 (OECD 117)	-
Citronellol	3.41 (EU Method A.8)	82.59 L/kg
trans-Menthone	2.295	15

12.4. Mobility in soil

Mobility in soil No information available.

Chemical name	log Koc
Benzyl Acetate	250
4-tert-Butylcyclohexyl Acetate	> 3243 - < 4603 L/kg (OECD 121)
2-T-Butylcyclohexyl Acetate	1300 (OECD 121)
Anisaldehyde	10
Ionone	625.1
Decanal	2.9
Isopropylphenylbutanal	741 L/kg (OECD 121)
Isoamyl Allylglycolate	80 L/kg
Cyclamen Aldehyde	3.05 (OECD 121)
3-(4-isobutyl-2-methylphenyl)propanal	1995.26 (OECD 121)
Lauraldehyde	3981.07 (OECD 121)
Coumarin	42.657
Methylundecanal	3981 (OECD 121)
Undecenal	852
Citronellol	70.79
trans-Menthone	63.8

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment No information available.

Chemical name	PBT and vPvB assessment
Linalool	The substance is not PBT / vPvB
Benzyl Acetate	The substance is not PBT / vPvB
4-tert-Butylcyclohexyl Acetate	The substance is not PBT / vPvB
2-T-Butylcyclohexyl Acetate	The substance is not PBT / vPvB
Anisaldehyde	The substance is not PBT / vPvB
Trimethylhexyl Acetate	The substance is not PBT / vPvB

Ionone	The substance is not PBT / vPvB
Citrus Nobilis Peel Oil	The substance is not PBT / vPvB
Decanal	The substance is not PBT / vPvB
Isopropylphenylbutanal	The substance is not PBT / vPvB
Isoamyl Allylglycolate	The substance is not PBT / vPvB
Cyclamen Aldehyde	The substance is not PBT / vPvB
Undecylenal	The substance is not PBT / vPvB
3-(4-isobutyl-2-methylphenyl)propanal	The substance is not PBT / vPvB
Lauraldehyde	The substance is not PBT / vPvB
Isobutenyl Methyltetrahydropyran	The substance is not PBT / vPvB
Coumarin	The substance is not PBT / vPvB
Methylundecanal	The substance is not PBT / vPvB Further information relevant for the PBT assessment is necessary
Undecenal	The substance is not PBT / vPvB
4,4a,5,9b-Tetrahydroindeno[1,2-d]-1,3-Dioxin	The substance is not PBT / vPvB
Cyclopropanemethanol, 1-Methyl-2-[[1,2,2-trimethylbicyclohex-3yl]methyl]-	The substance is not PBT / vPvB
Citronellol	The substance is not PBT / vPvB
trans-Menthone	The substance is not PBT / vPvB

12.6. Endocrine disrupting properties

Endocrine disrupting properties No information available.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products

The waste codes/waste designations below are in accordance with EWC. Waste must be delivered to an approved waste disposal company. Waste is to be kept separate from other types of waste until its disposal. Do not throw waste product into the sewer. Where possible recycling is preferred to disposal or incineration. Empty, uncleaned packaging need the same disposal considerations as filled packaging. For handling waste, see measures described in section 8. Dispose of in accordance with local regulations.

Contaminated packaging

Do not reuse empty containers.

Waste codes / waste designations according to EWC / AVV

20 01 29* - detergents containing dangerous substances
15 01 10* - packaging containing residues of or contaminated by dangerous substances

SECTION 14: Transport information

IATA

14.1 UN number or ID number

UN3082

14.2 UN proper shipping name

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(Undecenal, Pentamethylheptenone)

14.3 Transport hazard class(es)

9

14.4 Packing group

III

Description

UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(Undecenal, Pentamethylheptenone) , 9, III

14.5 Environmental hazards

Yes

14.6 Special precautions for user

Special Provisions

A97, A158, A197

Note:

The shipper is responsible for identifying any exemptions, including Limited Quantity, that may apply based on package size.

IMDG

14.1 UN number or ID number	UN3082
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Undecenal, Pentamethylheptenone)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Undecenal, Pentamethylheptenone), 9, III, Marine pollutant
14.5 Environmental hazards	Yes
14.6 Special precautions for user	
Special Provisions	274, 335, 969
EmS-No	F-A, S-F
14.7 Maritime transport in bulk according to IMO instruments	No information available
Note:	The shipper is responsible for identifying any exemptions, including Limited Quantity, that may apply based on package size.

RID

14.1 UN number or ID number	UN3082
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Undecenal, Pentamethylheptenone)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Undecenal, Pentamethylheptenone), 9, III
14.5 Environmental hazards	Yes
14.6 Special precautions for user	
Special Provisions	274, 335, 375, 601
Classification code	M6

ADR

14.1 UN number or ID number	UN3082
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Undecenal, Pentamethylheptenone)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Undecenal, Pentamethylheptenone), 9, III
14.5 Environmental hazards	Yes
14.6 Special precautions for user	
Special Provisions	274, 335, 601, 375
Classification code	M6
Tunnel restriction code	(-)

ADN

14.1 UN number or ID number	UN3082
14.2 Extended proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Undecenal, Pentamethylheptenone)
Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Undecenal, Pentamethylheptenone), 9, III
14.3 Transport hazard class(es)	9
14.4 Packing group	III
14.5 Marine pollutant	Not regulated
Classification code	M6
Hazard label(s)	9
Limited quantity (LQ)	5 L
Equipment Requirements	PP

SECTION 15: Regulatory information

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

National regulations

Germany

Water hazard class (WGK) strongly hazardous to water (WGK 3)

Poland

Announcement of the Speaker of the Sejm of the Republic of Poland of 13 April 2018 regarding the publication of a uniform text of the Act - Labor Code (Journal of Laws 2018, item 917, as amended). Announcement of the Speaker of the Sejm of the Republic of Poland of March 15, 2019 regarding the publication of a uniform text of the Act on Waste (Journal of Laws 2019 item 701, as amended). Regulation of the Minister of Development of 7 July 2016, repealing the Regulation on specific requirements for certain products due to their negative environmental impact (Journal of Laws of 2016, item 1099, as amended). Regulation of the Minister of Family, Labor and Social Policy of June 12, 2018 regarding the highest permissible concentrations and intensities of factors harmful to health in the work environment (Journal of Laws of 2018, item 1286 with subsequent amendments).

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Authorizations and/or restrictions on use:

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII) Regulation (EC) No. 648/2004 (Detergents regulation) Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP] Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH) Regulation (EC 1907/2006)

Chemical name	Restricted substance per REACH Annex XVII	Substance subject to authorization per REACH Annex XIV
Linalool	75.	-

Persistent Organic Pollutants

Not applicable

Dangerous substance category per Seveso Directive (2012/18/EU)

E2 - Hazardous to the Aquatic Environment in Category Chronic 2

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

EU - Biocides

Chemical name	EU - Biocides
Geranodyle - 42822-86-6	Product-type 19: Repellents and attractants

15.2. Chemical safety assessment

Chemical Safety Report

No chemical safety assessment has been carried out for this mixture per REACH regulation.

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of H-Statements referred to under section 3

- H226 - Flammable liquid and vapor
- H302 - Harmful if swallowed
- H304 - May be fatal if swallowed and enters airways
- H315 - Causes skin irritation
- H317 - May cause an allergic skin reaction
- H318 - Causes serious eye damage

H319 - Causes serious eye irritation
 H330 - Fatal if inhaled
 H361 - Suspected of damaging fertility or the unborn child
 H361f - Suspected of damaging fertility
 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

Legend

SVHC: Substances of Very High Concern for Authorization:

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

Classification procedure	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Skin sensitization	Calculation method
Chronic aquatic toxicity	Calculation method

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Further information Salts listed in Section 3 without a REACH Registration number are exempt, based on Annex V.

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet