



Kemetyl

Safety data sheet

According to Regulation (EU) No 2020/878

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name : SHELL AIR FRESHENER LITTLE JOE ODOUR NEUTRALIZER
Product code : CRX853, AL61E

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

Application : SU21 Consumer product. PC3 Air care products for vehicles. Airfreshener.

1.3. Details of the supplier of the safety data sheet

Supplier : Kemetyl Polska Sp. z o. o.
Al. Jerozolimskie 146
02-305 Warszawa, Poland
Telephone : +48 22 822 5390
E-mail : msds@kemetyl.com
Website : www.kemetyl.pl

1.4. Emergency telephone number

EMERGENCY TELEPHONE NUMBER, for DOCTORS/FIRE BRIGADE/POLICE only:

PL - Telephone : +48 22 822 5390

(During office hours only)

SECTION 2 HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

CLP classification : Eye irritation, category 2. Skin sensitization, category 1. Hazardous to the aquatic environment —
(1272/2008/EC) Chronic category 3.

Human health hazards : May cause an allergic skin reaction. Causes serious eye irritation.

Physical/chemical hazards : Not classified as dangerous according to statutory EC-Directives. Combustible.

Environmental hazards : Harmful to aquatic life with long lasting effects.

2.2. Label elements

Label elements ((EU) 1272/2008):

Hazard pictograms :



Signal word : Warning

H- and P-phrases : H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H412 Harmful to aquatic life with long lasting effects.
P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P280 Wear protective gloves and eye protection.
P302+P352 IF ON SKIN: Wash with plenty of water/soap.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P273 Avoid release to the environment.
P501 Dispose of contents/container to an official chemical waste depot.



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Labelling of packagings where the contents do not exceed 125 ml and it is technically impossible to list all phrases:

Hazard pictograms :



Signal word : Warning

H- and P-phrases :

H317	May cause an allergic skin reaction.
H412	Harmful to aquatic life with long lasting effects.
P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P280	Wear protective gloves.
P302+P352	IF ON SKIN: Wash with plenty of water/soap.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P501	Dispose of contents/container to an official chemical waste depot.

Additional labelling (for all packaging sizes)

: Contains: Benzyl salicylate ; 3,7-Dimethyloctan-3-ol ; Coumarin ; 7-Hydroxycitronellal ; Geraniol ; Nerol ; Geranyl acetate ; [3R-(3 α ,3 β ,6 α ,7 β ,8 α)]-Octahydro-6-methoxy-3,6,8,8-tetramethyl-1H-3a,7-methanoazulene ; Piperonal ; Alpha-methyl-1,3-benzodioxole-5-propionaldehyde ; Citronellol ; 3-p-Cumenyl-2-methylpropionaldehyde ; Methyl 2,4-dihydroxy-3,6-dimethylbenzoate ; 2-(2,2,7,7-Tetremethyltricyclo[6.2.1.0((1,6))undec-5 and 4-en-5-yl)propan-1-ol ; Undec-10-enal ; 1-(2,6,6-trimethyl-1-cyclohexen-1-yl)pent-1-en-3-one ; Reaction mass of 2-methylbutyl salicylate and isopentyl salicylate ; Trans-delta-damascone ; Reaction mass of 1-(3,3-dimethylcyclohex-1-en-1-yl)pent-4-en-1-one and 1-(5,5-dimethylcyclohex-1-en-1-yl)pent-4-en-1-one ; 4-Hydroxy-2,5-dimethylfuran-2(3H)-one .

2.3. Other hazards

Other information : Does not contain PBT or vPvB substances in concentrations higher than 0,1%. Human health: This product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Regulation (EU) 2017/2100 or Regulation (EU) 2018/605 at levels of 0.1% or higher. Environment: This product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Regulation (EU) 2017/2100 or Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

3.2. Mixtures

Product description : Mixture.

Information on hazardous substances:

Substance name	Concentration (w/w) (%)	CAS nr.	EC number	Remark	REACH nr.
2-Phenylethanol	10 - < 20	60-12-8	200-456-2		01-2119963921-31
Benzyl acetate	5 - < 10	140-11-4	205-399-7		01-2119638272-42
Benzyl salicylate	1 - < 5	118-58-1	204-262-9		01-2119969442-31
3,7-Dimethyloctan-3-ol	1 - < 5	78-69-3	201-133-9		01-2119454788-21
3-Methyl-4-(2,6,6-trimethyl-2-cyclohexen-1-yl)-3-buten-2-one	2,5 - < 5	127-51-5	204-846-3		
Coumarin	1 - < 5	91-64-5	202-086-7		01-2119949300-45
7-Hydroxycitronellal	1 - < 5	107-75-5	203-518-7		01-2119973482-31
Tetrahydro-2-isobutyl-4-methylpyran-4-ol, mixed isomers (cis and trans)	1 - < 5	63500-71-0	405-040-6		01-2119455547-30



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Ionone, methyl-	1 - < 2,5	-----	942-741-0		01-2119471851-35
2-Ethyl-3-hydroxy-4-pyrone	1 - < 5	4940-11-8	225-582-5		01-2120758795-36
Geraniol	1 - < 3	106-24-1	203-377-1		01-2119552430-49
Nerol	1 - < 5	106-25-2	203-378-7		01-2119983244-33
Geranyl acetate	0,1 - < 1	105-87-3	203-341-5		01-2119973480-35
[3R-(3α,3αβ,6α,7β,8α)]-Octahydro-6-methoxy-3,6,8,8-tetramethyl-1H-3a,7-methanoazulene	0,1 - < 1	67874-81-1	267-510-5		01-2120228335-61
Piperonal	0,1 - < 1	120-57-0	204-409-7		01-2119983608-21
Alpha-methyl-1,3-benzodioxole-5-propionaldehyde	0,1 - < 1	1205-17-0	214-881-6		01-2120740119-58
Citronellol	0,1 - < 1	106-22-9	203-375-0		01-2119453995-23
3-p-Cumenyl-2-methylpropionaldehyde	0,1 - < 1	103-95-7	203-161-7		01-2119970582-32
Methyl 2,4-dihydroxy-3,6-dimethylbenzoate	0,1 - < 1	4707-47-5	225-193-0		01-2120762759-36
2-(2,2,7,7-Tetremethyltricyclo[6.2.1.0((1,6))]undec-5 and 4-en-5-yl)propan-1-ol	0,1 - < 1	1001252-30-7	482-030-8		01-0000020145-80
Undec-10-enal	0,1 - < 1	112-45-8	203-973-1		
Tetrahydro-4-methyl-2-(2-methylprop-1-enyl)pyran	0,1 - < 1	16409-43-1	240-457-5		01-2119976300-42
1-(2,6,6-trimethyl-1-cyclohexen-1-yl)pent-1-en-3-one	0,1 - < 1	127-43-5	204-843-7		
Reaction mass of 2-methylbutyl salicylate and isopentyl salicylate	0,1 - < 1	-----	904-908-6		01-2120809315-60
Trans-delta-damascone	0,1 - < 1	71048-82-3	275-156-8		01-2119535122-53
Reaction mass of 1-(3,3-dimethylcyclohex-1-en-1-yl)pent-4-en-1-one and 1-(5,5-dimethylcyclohex-1-en-1-yl)pent-4-en-1-one	0,1 - < 1	-----	944-482-9		01-2120739840-52
4-Hydroxy-2,5-dimethylfuran-2(3H)-one	0,01 - < 0,1	3658-77-3	222-908-8		

Substance name	Hazard Class	H-phrases	Pictograms	
2-Phenylethanol	Acute Tox. 4; Eye Irrit. 2	H302; H319	GHS07	
Benzyl acetate	Aquatic Chronic 3	H412		
Benzyl salicylate	Eye Irrit. 2; Aquatic Chronic 3; Skin Sens. 1B	H319; H412; H317	GHS07	
3,7-Dimethyloctan-3-ol	Skin Irrit. 2; Skin Sens. 1B; Eye Irrit. 2	H315; H317; H319	GHS07	
3-Methyl-4-(2,6,6-trimethyl-2-cyclohexen-1-yl)-3-buten-2-one	Aquatic Chronic 2	H411	GHS09	
Coumarin	Acute Tox. 4; Skin Sens. 1B; Aquatic Chronic 3	H302; H317; H412	GHS07	
7-Hydroxycitronellal	Skin Sens. 1B; Eye Irrit. 2	H317; H319	GHS07	
Tetrahydro-2-isobutyl-4-methylpyran-4-ol, mixed isomers (cis and trans)	Eye Irrit. 2	H319	GHS07	
Ionone, methyl-	Skin Irrit. 2; Eye Irrit. 2; Aquatic Chronic 2	H315; H319; H411	GHS07; GHS09	
2-Ethyl-3-hydroxy-4-pyrone	Acute Tox. 4	H302	GHS07	
Geraniol	Skin Irrit. 2; Skin Sens. 1B; Eye Dam. 1	H315; H317; H318	GHS05; GHS07	



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Nerol	Skin Irrit. 2; Skin Sens. 1B; Eye Irrit. 2	H315; H317; H319	GHS07	
Geranyl acetate	Skin Irrit. 2; Skin Sens. 1B; Aquatic Chronic 3	H315; H317; H412	GHS07	
[3R-(3 α ,3 α β ,6 α ,7 β ,8 α)]-Octahydro-6-methoxy-3,6,8,8-tetramethyl-1H-3a,7-methanoazulene	Skin Sens. 1B; Aquatic Acute 1; Aquatic Chronic 1	H317; H400; H410	GHS07; GHS09	M (acute) = 1 M (chronic) = 1
Piperonal	Skin Sens. 1B; Repr. 2	H317; H361fd	GHS07; GHS08	
Alpha-methyl-1,3-benzodioxole-5-propionaldehyde	Skin Sens. 1B; Repr. 2; Aquatic Chronic 2	H317; H361fd; H411	GHS07; GHS08; GHS09	
Citronellol	Skin Irrit. 2; Skin Sens. 1B; Eye Irrit. 2	H315; H317; H319	GHS07	
3-p-Cumenyl-2-methylpropionaldehyde	Skin Irrit. 2; Skin Sens. 1B; Aquatic Chronic 3	H315; H317; H412	GHS07	
Methyl 2,4-dihydroxy-3,6-dimethylbenzoate	Skin Sens. 1B	H317	GHS07	
2-(2,2,7,7-Tetremethyltricyclo[6.2.1.0((1,6))]undec-5 and 4-en-5-yl)propan-1-ol	Skin Irrit. 2; Skin Sens. 1; Aquatic Acute 1; Aquatic Chronic 1	H315; H317; H400; H410	GHS07; GHS09	
Undec-10-enal	Skin Irrit. 2; Skin Sens. 1B; Eye Irrit. 2; Aquatic Chronic 3	H315; H317; H319; H412	GHS07	
Tetrahydro-4-methyl-2-(2-methylprop-1-enyl)pyran	Skin Irrit. 2; Eye Irrit. 2; Repr. 2	H315; H319; H361	GHS07; GHS08	
1-(2,6,6-trimethyl-1-cyclohexen-1-yl)pent-1-en-3-one	Skin Irrit. 2; Skin Sens. 1B; Aquatic Chronic 2	H315; H317; H411	GHS07; GHS09	
Reaction mass of 2-methylbutyl salicylate and isopentyl salicylate	Skin Sens. 1; Aquatic Acute 1; Aquatic Chronic 3	H317; H400; H412	GHS07; GHS09	M (acute) = 1
Trans-delta-damascone	Acute Tox. 4; Skin Irrit. 2; Skin Sens. 1B; Aquatic Acute 1; Aquatic Chronic 1	H302; H315; H317; H400; H410	GHS07; GHS09	M (chronic) = 1
Reaction mass of 1-(3,3-dimethylcyclohex-1-en-1-yl)pent-4-en-1-one and 1-(5,5-dimethylcyclohex-1-en-1-yl)pent-4-en-1-one	Skin Sens. 1B; Aquatic Chronic 2	H317; H411	GHS07; GHS09	
4-Hydroxy-2,5-dimethylfuran-2(3H)-one	Acute Tox. 4; Skin Corr. 1B; Skin Sens. 1A; Eye Dam. 1	H302; H314; H317; H318	GHS05; GHS07	

Occupational exposure limit(s), if relevant, are listed in section 8.

Reference is made to chapter 16 for full text of each relevant H phrase.

SECTION 4 FIRST-AID MEASURES

4.1. Description of first aid measures

First aid measures

- Inhalation : Not applicable under normal conditions of use. Consult a doctor if victim feels unwell.
- Skin contact : Take off contaminated clothing. Wash off skin with plenty of water and soap before product dries up. Consult a doctor if irritation occurs.
- Eye contact : Wash out with (lukewarm) water. Remove contact lenses. Consult a doctor.
- Ingestion : Do not induce vomiting. Do rinse the mouth. Give one glass of water. Never give anything by mouth to an unconscious person. Consult a doctor if victim feels unwell.



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

Effects and symptoms

- Inhalation : No specific effects and/or symptoms are known.
- Skin contact : May cause redness and irritation, sensitisation. May produce an allergic reaction. May cause dry skin.
- Eye contact : Irritant. May cause redness and pain.
- Ingestion : May cause a feeling of sickness, vomiting and diarrhoea.

4.3. Indication of any immediate medical attention and special treatment needed

Note to physicians : None known.

SECTION 5 FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

- Suitable : Carbon dioxide (CO₂). Foam. Dry chemical. Water fog.
- Not suitable : Water jet. Use of heavy stream of water may spread fire.

5.2. Special hazards arising from the substance or mixture

- Special exposure hazards : None known.
- Hazardous thermal decomposition and combustion products : Carbon monoxide may be evolved if incomplete combustion occurs.

5.3. Advice for firefighters

Special protective equipment for fire-fighters : Use adequate respiratory equipment in case of insufficient ventilation.

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions : Danger of slipping. Clean up spills immediately. Wear shoes with non-slip soles. Avoid contact with spilled or released material. Vapours are heavier than air. Build up (of gasses) in low areas involves risk of suffocation.

6.2. Environmental precautions

- Environmental precautions : Avoid release of product into sewers, surface water and/or ground water. In case of large spills: contain with dike. Waste product should not be allowed to contaminate soil or water.
- Other information : Notify authorities if any exposure to the general public or the environment occurs or is likely to occur.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Collect spilled material in containers. Dispose at an authorised waste collection point. Wash away remainder with plenty of water and soap.

6.4. Reference to other sections

Reference to other sections : See also section 8.



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SECTION 7 HANDLING AND STORAGE

7.1. Precautions for safe handling

Handling : Handle in accordance with good occupational hygiene and safety practices in well-ventilated areas. Keep away from sources of ignition — No smoking. Avoid contact with skin and eyes. Avoid splashing. Wear protective clothing.

7.2. Conditions for safe storage, including any incompatibilities

Storage : Keep frost-free, in a cool, dry and well-ventilated place. Keep away from oxidizing agents.
Recommended packaging : Keep only in the original container.
Non recommended packaging : None known.

7.3. Specific end use(s)

Use : Use only as directed.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits : Occupational exposure limits have not been established for this product. Derived no-effect levels (DNEL) have not been established for this product. Predicted no-effect concentrations (PNEC) have not been established for this product.

Workplace exposure limits (mg/m³):

Chemical name	Country	TWA 8 hour (mg/m ³)	STEL 15 min (mg/m ³)	Comments	Source
Benzyl acetate		5	-		MAC: LT

Derived no-effect level (DNEL) for workers:

Chemical name	Route of exposure	DNEL, short-term		DNEL, long-term	
		Local effect	Systemic effect	Local effect	Systemic effect
2-Phenylethanol	Inhalation				59,9 mg/m ³
	Dermal				21,2 mg/kg bw/day
Benzyl acetate	Inhalation				9 mg/m ³
	Dermal				2,5 mg/kg bw/day
Benzyl salicylate	Inhalation				7,8 mg/m ³
	Dermal				2,21 mg/kg bw/day
3,7-Dimethyloctan-3-ol	Inhalation				11,14 mg/m ³
	Dermal			0,190 mg/kg bw/day	3,16 mg/kg bw/day
3-Methyl-4-(2,6,6-trimethyl-2-cyclohexen-1-yl)-3-buten-2-one	Inhalation				8.22 mg/m ³
	Dermal				0.375 mg/kg bw/day
Coumarin	Dermal				0,79 mg/kg bw/day
	Inhalation				6,78 mg/m ³
7-Hydroxycitronellal	Inhalation				18 mg/m ³
	Dermal			0.5 mg/kg bw/day	1,9 mg/kg bw/day
Tetrahydro-2-isobutyl-4-methylpyran-4-ol, mixed isomers (cis and trans)	Inhalation				44,1 mg/m ³
	Dermal				41,7 mg/kg bw/day



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Ionone, methyl-	Inhalation				26.1 mg/m ³
	Dermal				14.8 mg/kg bw/day
2-Ethyl-3-hydroxy-4-pyrone	Inhalation				58,7 mg/m ³
	Dermal				16,7 mg/kg bw/day
Geraniol	Inhalation				161,6 mg/m ³
	Dermal				12,5 mg/kg bw/day
Nerol	Inhalation				4.4 mg/m ³
	Dermal				1.25 mg/kg bw/day
Geranyl acetate	Inhalation				62,59 mg/m ³
	Dermal				35,5 mg/kg bw/day
[3R-(3α,3aβ,6α,7β,8α)]-Octahydro-6-methoxy-3,6,8,8-tetramethyl-1H-3a,7-methanoazulene	Inhalation				16.1 mg/m ³
	Dermal			2.03 mg/kg bw/day	4.5 mg/kg bw/day
Piperonal	Inhalation				5,29 mg/m ³
	Dermal				0,75 mg/kg bw/day
Alpha-methyl-1,3-benzodioxole-5-propionaldehyde	Inhalation				1,2 mg/m ³
	Dermal			0,01 mg/kg bw/day	0,17 mg/kg bw/day
Citronellol	Inhalation	10 mg/m ³		10 mg/m ³	161,6 mg/m ³
	Dermal	2,950 mg/kg bw			327,4 mg/kg bw/day
3-p-Cumenyl-2-methylpropionaldehyde	Inhalation				5,83 mg/m ³
	Dermal			0,00743 mg/kg bw/day	1,67 mg/kg bw/day
Methyl 2,4-dihydroxy-3,6-dimethylbenzoate	Dermal			2,5 mg/kg bw/day	
Undec-10-enal	Inhalation				13,5 mg/m ³
	Dermal				3,8 mg/kg bw/day
Tetrahydro-4-methyl-2-(2-methylprop-1-enyl)pyran	Inhalation				1,2 mg/m ³
	Dermal				0,3 mg/kg bw/day
Reaction mass of 2-methylbutyl salicylate and isopentyl salicylate	Inhalation				2.27 mg/m ³
	Dermal				0.644 mg/kg bw/day
Trans-delta-damascone	Inhalation				1,5 mg/m ³
	Dermal			0,014 mg/kg bw/day	0,4 mg/kg bw/day
Reaction mass of 1-(3,3-dimethylcyclohex-1-en-1-yl)pent-4-en-1-one and 1-(5,5-dimethylcyclohex-1-en-1-yl)pent-4-en-1-one	Inhalation				6.2 mg/m ³
	Dermal			0.232 mg/kg bw/day	1.75 mg/kg bw/day

Derived no-effect level (DNEL) for consumers:

Chemical name	Route of exposure	DNEL, short-term		DNEL, long-term	
		Local effect	Systemic effect	Local effect	Systemic effect
2-Phenylethanol	Inhalation				17,7 mg/m ³
	Dermal				12,7 mg/kg bw/day
	Oral		5,1 mg/kg bw		5,1 mg/kg bw/day
Benzyl acetate	Inhalation				2.2 mg/m ³
	Dermal				1.3 mg/kg bw/day



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Benzyl salicylate	Oral Inhalation Dermal		6,25 mg/kg bw		1.3 mg/kg bw/day 1,37 mg/m3
3,7-Dimethyloctan-3-ol	Oral Inhalation Dermal			0,190 mg/kg bw/day	0,79 mg/kg bw/day 0,79 mg/kg bw/day 2,75 mg/m3 1,58 mg/kg bw/day
3-Methyl-4-(2,6,6-trimethyl-2-cyclohexen-1-yl)-3-buten-2-one	Oral Inhalation				1,58 mg/kg bw/day 1.45 mg/m3
Coumarin	Dermal Oral Dermal Oral				0.0446 mg/kg bw/day 0.0355 mg/kg bw/day 0,39 mg/kg bw/day 0,39 mg/kg bw/day
7-Hydroxycitronellal	Inhalation Inhalation Dermal			0.5 mg/kg bw/day	1,69 mg/m3 5,4 mg/m3 1,1 mg/kg bw/day
Tetrahydro-2-isobutyl-4-methylpyran-4-ol, mixed isomers (cis and trans)	Oral Inhalation				0,6 mg/kg bw/day 13 mg/m3
Ionone, methyl-	Dermal Oral Inhalation Dermal				25 mg/kg bw/day 7,5 mg/kg bw/day 6.4 mg/m3 7.4 mg/kg bw/day
2-Ethyl-3-hydroxy-4-pyrone	Oral Inhalation Dermal				3.7 mg/kg bw/day 17,4 mg/m3 10 mg/kg bw/day
Geraniol	Oral Inhalation Dermal				10 mg/kg bw/day 47,8 mg/m3 7,5 mg/kg bw/day
Nerol	Oral Inhalation Dermal				13,75 mg/kg bw/day 1.09 mg/m3 0.62 mg/kg bw/day
Geranyl acetate	Oral Inhalation Dermal				0.62 mg/kg bw/day 15,4 mg/m3 17,75 mg/kg bw/day
[3R-(3 α ,3 α β ,6 α ,7 β ,8 α)]-Octahydro-6-methoxy-3,6,8,8-tetramethyl-1H-3a,7-methanoazulene	Oral Inhalation				8,9 mg/kg bw/day 4.7 mg/m3
Piperonal	Dermal Oral Inhalation Dermal			1.22 mg/kg bw/day	2.7 mg/kg bw/day 2.7 mg/kg bw/day 1,3 mg/m3 0,375 mg/kg bw/day
Alpha-methyl-1,3-benzodioxole-5-propionaldehyde	Oral Inhalation				0,375 mg/kg bw/day 0,29 mg/m3
Citronellol	Dermal Oral Inhalation Dermal	10 mg/m3 2,950 mg/kg bw		0,005 mg/kg bw/day 10 mg/m3	0,083 mg/kg bw/day 0,17 mg/kg bw/day 47,8 mg/m3 196,4 mg/kg bw/day



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3-p-Cumenyl-2-methylpropionaldehyde	Oral				13,8 mg/kg bw/day
	Inhalation				1,45 mg/m3
Methyl 2,4-dihydroxy-3,6-dimethylbenzoate	Dermal			0,00372 mg/kg bw/day	0,83 mg/kg bw/day
	Oral				0,83 mg/kg bw/day
Undec-10-enal	Dermal			1,25 mg/kg bw/day	
	Inhalation				3,3 mg/m3
Tetrahydro-4-methyl-2-(2-methylprop-1-enyl)pyran	Dermal				1,9 mg/kg bw/day
	Oral				1,9 mg/kg bw/day
Reaction mass of 2-methylbutyl salicylate and isopentyl salicylate	Inhalation				0,3 mg/m3
	Dermal				0,2 mg/kg bw/day
Trans-delta-damascone	Oral				0,2 mg/kg bw/day
	Dermal			0,0086 mg/kg bw/day	0,25 mg/kg bw/day
Reaction mass of 1-(3,3-dimethylcyclohex-1-en-1-yl)pent-4-en-1-one and 1-(5,5-dimethylcyclohex-1-en-1-yl)pent-4-en-1-one	Oral				0,25 mg/kg bw/day
	Inhalation				0,43 mg/m3
	Inhalation				1,83 mg/m3
	Dermal			0,116 mg/kg bw/day	1,05 mg/kg bw/day
	Oral				1,05 mg/kg bw/day

Predicted no-effect concentration (PNEC):

Chemical name	Route of exposure	Fresh water	Marine water	
2-Phenylethanol	Water	0,215 mg/l	0,0215 mg/l	
	Sediment	1,454 mg/kg	0,1454 mg/kg	
	Intermittent water			2,15 mg/l
	STP			10 mg/l
Benzyl acetate	Soil			0,164 mg/kg
	Water	0,018 mg/l	0,002 mg/l	
	Sediment	0,526 mg/kg	0,053 mg/kg	
	Intermittent water			0,04 mg/l
Benzyl salicylate	STP			8,55 mg/l
	Soil			0,094 mg/kg
	Water	0,001 mg/l	0 mg/l	
	Sediment	0,583 mg/kg	0,058 mg/kg	
3,7-Dimethyloctan-3-ol	Intermittent water			0,01030 mg/l
	STP			10 mg/l
	Soil			1,41 mg/kg
	Oral			52,7 mg/kg food
3-Methyl-4-(2,6,6-trimethyl-2-cyclohexen-1-yl)-3-buten-2-one	Water	0,009 mg/l	0,001 mg/l	
	Sediment	0,082 mg/kg	0,008 mg/kg	
	Intermittent water			0,089 mg/l
	STP			450 mg/l
3-Methyl-4-(2,6,6-trimethyl-2-cyclohexen-1-yl)-3-buten-2-one	Soil			0,011 mg/kg
	Water	0,00143 mg/l	0,000143 mg/l	
	Sediment	0,443 mg/kg	0,0443 mg/kg	



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Coumarin	STP			10 mg/l
	Soil			0.0878 mg/kg
	Water	0,019 mg/l	0,0019 mg/l	
	Sediment	0,15 mg/kg	0,015 mg/kg	
7-Hydroxycitronellal	Intermittent water			0,0142 mg/l
	STP			6,4 mg/l
	Soil			0,018 mg/kg
	Oral			30,7 mg/kg food
Tetrahydro-2-isobutyl-4-methylpyran-4-ol, mixed isomers (cis and trans)	Water	0,0316 mg/l	0,00316 mg/l	
	Sediment	0,145 mg/kg	0,015 mg/kg	
	STP			10 mg/l
	Soil			0,011 mg/kg
Ionone, methyl-	Water	0,094 mg/l	0,009 mg/l	
	Sediment	0,412 mg/kg	0,041 mg/kg	
	Intermittent water			0,94 mg/l
	STP			10 mg/l
2-Ethyl-3-hydroxy-4-pyrone	Soil			0,09 mg/kg
	Water	0,002 mg/l	0 mg/l	
	Sediment	0,168 mg/kg	0,017 mg/kg	
	Intermittent water			0,023 mg/l
Geraniol	STP			10 mg/l
	Soil			0,033 mg/kg
	Water	0,0072 mg/l	0,00072 mg/l	
	Sediment	0,27 mg/kg	0,027 mg/kg	
Nerol	STP			1,55 mg/l
	Soil			0,049 mg/kg
	Water	0,0108 mg/l	0,0010 mg/l	
	Sediment	0,115 mg/kg	0,0115 mg/kg	
Geranyl acetate	Intermittent water			0,108 mg/l
	STP			0,7 mg/l
	Soil			0,0167 mg/kg
	Water	0,00745 mg/l	0,000745 mg/l	
[3R-(3α,3aβ,6α,7β,8α)]-Octahydro-6-methoxy-3,6,8,8-tetramethyl-1H-3a,7-methanoazulene	Sediment	0,133 mg/kg	0,0133 mg/kg	
	Intermittent water			0,0745 mg/l
	STP			12,9 mg/l
	Soil			0,0223 mg/kg
Piperonal	Water	0,00372 mg/l	0,00037 mg/l	
	Sediment	0,442 mg/kg	0,442 mg/kg	
	Intermittent water			0,0372 mg/l
	STP			8 mg/l
Alpha-methyl-1,3-benzodioxole-5-propionaldehyde	Soil			0,0859 mg/kg
	Water	0,00043 mg/l	0,000043 mg/l	
	Sediment	1,29 mg/kg	0,129 mg/kg	
	STP			100 mg/l
Alpha-methyl-1,3-benzodioxole-5-propionaldehyde	Soil			0,257 mg/kg
	Water	0,0025 mg/l	0,0002 mg/l	
	Sediment	0,0119 mg/kg	0,0012 mg/kg	
	Intermittent water			0,025 mg/l
Alpha-methyl-1,3-benzodioxole-5-propionaldehyde	STP			10 mg/l
	Soil			0,0008 mg/kg
	Water	0,005 mg/l	0,001 mg/l	



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Citronellol	Sediment	0,057 mg/kg	0,006 mg/kg	
	STP			10 mg/l
	Soil			0,008 mg/kg
	Water	0.002 mg/l	0 mg/l	
3-p-Cumenyl-2-methylpropionaldehyde	Sediment	0.026 mg/kg	0.003 mg/kg	
	Intermittent water			0,024 mg/l
	STP			580 mg/l
	Soil			0.004 mg/kg
Methyl 2,4-dihydroxy-3,6-dimethylbenzoate	Water	0,00109 mg/l	0,00011 mg/l	
	Sediment	0,126 mg/kg	0.013 mg/kg	
	Intermittent water			0,01092 mg/l
	STP			1 mg/l
Undec-10-enal	Soil			0.025 mg/kg
	Oral			33.3 mg/kg food
	Water	0,0033 mg/l	0,00033 mg/l	
	Sediment	0,089 mg/kg	0,0089 mg/kg	
Tetrahydro-4-methyl-2-(2-methylprop-1-enyl)pyran	STP			10 mg/l
	Soil			0,016 mg/kg
	Water	0,0011 mg/l	0,00011 mg/l	
	Sediment	0,114 mg/kg	0,0114 mg/kg	
Reaction mass of 2-methylbutyl salicylate and isopentyl salicylate	Intermittent water			0,011 mg/l
	STP			3,16 mg/l
	Soil			0,0221 mg/kg
	Oral			85 mg/kg food
Trans-delta-damascone	Water	0,033 mg/l	0,0033 mg/l	
	Sediment	2,29 mg/kg	0,229 mg/kg	
	STP			10 mg/l
	Soil			0,437 mg/kg
Reaction mass of 1-(3,3-dimethylcyclohex-1-en-1-yl)pent-4-en-1-one and 1-(5,5-dimethylcyclohex-1-en-1-yl)pent-4-en-1-one	Water	0.000681 mg/l	0.0000681 mg/l	
	Sediment	0.3437 mg/kg	0.03437 mg/kg	
	STP			10 mg/l
	Soil			0.06863 mg/kg
Reaction mass of 1-(3,3-dimethylcyclohex-1-en-1-yl)pent-4-en-1-one	Oral			80 mg/kg food
	Water	0,007 mg/l	0,0007 mg/l	
	Sediment	0,906 mg/kg	0,0906 mg/kg	
	Intermittent water			0,0035 mg/l
	STP			2,41 mg/l
	Soil			0,177 mg/kg
	Oral			0.074 mg/kg food
	Water	0.0042 mg/l	0.00042 mg/l	
	Sediment	1.2 mg/kg	0.12 mg/kg	
	STP			4.6 mg/l
	Soil			0.24 mg/kg

8.2. Exposure controls

- Engineering measures : Comply with standard precautionary measures for working with chemicals. See Directive 2004/37/EG on the protection of workers from the risks related to exposure to carcinogens or mutagens at work.
- Hygienic measures : When using do not eat, drink or smoke.



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Personal protective equipment:

The efficiency of personal protective equipment depends among other things on temperature and degree of ventilation. Always get professional advice for the particular local situation.



- Body protection : Wear appropriate protective clothing, overalls or suit, and similar boots in accordance with EN 365/367 resp. 345. Suitable material: laminated film. Indication of permeation breakthrough time: not known.
- Respiratory protection : Take care of sufficient ventilation. Wear suitable respiratory protection in case of large scale exposure. Suitable: gas filter type A (brown), class I or higher on e.g. a facemask in accordance with EN 140.
- Hand protection : Wear appropriate safety gloves in accordance with EN 374. Suitable material: laminated film. $\pm 0,5$ mm. Indication of permeation breakthrough time: not known.
- Eye protection : Wear appropriate safety glasses with side shields, in accordance with EN 166, when there is danger of possible eye contact.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state	: Liquid.	Impregnated material.
Colour	: Light yellow.	
Odour	: Perfumed.	
Odour threshold	: Not known.	
pH	: Not applicable.	Waterfree product.
Solubility in water	: Not soluble.	
Partition coefficient (n-octanol/water)	: Not known.	Not measured. Not relevant for mixtures.
Flash point	: > 60 °C	
Flammability (solid, gas)	: Not applicable.	Liquid. See flashpoint.
Auto ignition temperature	: > 240 °C	
Boiling point/boiling range	: > 100 °C	
Melting point/melting range	: Not known.	
Explosive properties	: Not an explosive.	
Explosion limits (% in air)	: Not known.	Lower explosion limit in air (%): 1,4 (2-Phenylethanol) Upper explosion limit in air (%): 11,9 (2-Phenylethanol)
Oxidising properties	: Not applicable.	Does not contain oxidizing substances.
Decomposition temperature	: Not applicable.	
Viscosity (20°C)	: Not known.	
Viscosity (40°C)	: Not relevant.	The product contains < 10% substances having an aspiration hazard.
Vapour pressure (20°C)	: Not known.	
Relative vapour density	: > 1	(air = 1)
Relative density (20°C)	: 1 g/ml	
Particle characteristics	: Not applicable.	Liquid.

9.2. Other information

Other information : Not relevant.

SECTION 10 STABILITY AND REACTIVITY



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10.1. Reactivity

Reactivity : See sub-sections below.

10.2. Chemical stability

Stability : Stable under normal conditions.

10.3. Possibility of hazardous reactions

Reactivity : No other hazardous reactions known.

10.4. Conditions to avoid

Conditions to avoid : See section 7.

10.5. Incompatible materials

Materials to avoid : Keep away from oxidizing agents.

10.6. Hazardous decomposition products

Hazardous decomposition products : Not known.

SECTION 11 TOXICOLOGICAL INFORMATION *

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

No toxicological research has been carried out on this product.

Inhalation

- Acute toxicity : Calculated LC50: > 10 mg/l. Ingredients of unknown toxicity: 30 %. ATE: > 5 mg/l. Low toxicity. Not classified - based on available data, the classification criteria are not met.
- Corrosion/irritation : Not classified - based on available data, the classification criteria are not met.
- Sensitisation : Does not contain substances classified as respiratory sensitiser. Not classified - based on available data, the classification criteria are not met.
- Carcinogenicity : Not expected to be carcinogenic. Not classified - based on available data, the classification criteria are not met.
- Mutagenicity : Does not contain mutagenic substances. Not classified - based on available data, the classification criteria are not met.

Skin contact

- Acute toxicity : Calculated LD50: > 5000 mg/kg.bw. Ingredients of unknown toxicity: < 1 %. ATE: > 5000 mg/kg.bw. Low toxicity. Not classified - based on available data, the classification criteria are not met.
- Corrosion/irritation : Not classified - based on available data, the classification criteria are not met.
- Sensitisation : May cause sensitisation by skin contact. May produce an allergic reaction.
- Mutagenicity : Does not contain mutagenic substances. Not classified - based on available data, the classification criteria are not met.

Eye contact

- Corrosion/irritation : Irritant.

Ingestion

- Acute toxicity : Calculated LD50: > 3384 mg/kg.bw. Ingredients of unknown toxicity: < 1 %. ATE: > 2000 mg/kg.bw. Low toxicity. Not classified - based on available data, the classification criteria are not met.
- Aspiration : Danger of aspiration is not expected. Contains a substance/substances with an aspiration hazard. Not classified - based on available data, the classification criteria are not met.
- Corrosion/irritation : May cause a feeling of sickness, vomiting and diarrhoea.
- Carcinogenicity : Not expected to be carcinogenic. Not classified - based on available data, the classification criteria are not met.



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Mutagenicity : Does not contain mutagenic substances. Not classified - based on available data, the classification criteria are not met.

Reprotoxicity : Development: Not classified - Based on available data, the classification criteria are not met.

Fertility: Not classified - based on available data, the classification criteria are not met.

Toxicological information:

Chemical name	Property		Method	Test animal	
2-Phenylethanol	LD50 (oral)	1609 mg/kg bw	-----	Rat	
	NOAEL (dermal)	510 mg/kg bw/d	OECD 411	Rat	
	Genotoxicity - in vitro	Not genotoxic	OECD 476		
	NOAEL (development, oral)	4,3 mg/kg bw/d		Rat	
	Eye irritation	Irritant	-----	Rabbit	
	Skin irritation	Slightly irritant	-----	Rabbit	
	LD50 (dermal)	2535 mg/kg bw	OECD 402	Rabbit	
	Skin sensitisation - estimate	Not sensitizing			
	LC50 (inhalation)	> 4630 mg/m3		Rat	
	NOAEL (developmental toxicity, dermal)	140 mg/kg bw/d		Rat	
	Mutagenicity	Negative	OECD 471	Salmonella typhimurium	
	LC50 (inhalation) - estimate	> 5000 mg/m3		Rat	
	Benzyl salicylate	NOAEL (fertility, oral)	158 mg/kg bw/d	OECD 421	Rat
Skin sensitisation		725 ug/cm2	OECD 429	Mouse	
NOAEL (oral)		177 mg/kg bw/d	OECD 408	Rat	
Skin irritation		Non-irritant	OECD 404	Rabbit	
NOAEL (development, oral)		158 mg/kg bw/d	OECD 421	Rat	
Mutagenicity		Negative	OECD 471	Salmonella typhimurium	
Genotoxicity - in vitro		Not genotoxic	OECD 476	Chinese Hamster	
Eye irritation		Moderately irritant	-----	Rabbit	
LD50 (oral) - estimate		> 2000 mg/kg bw	Read across		
LD50 (dermal) - estimate		> 2000 mg/kg bw	Read across		
3,7-Dimethyloctan-3-ol		LD50 (oral)	8270 mg/kg bw		Rat
		LD50 (dermal)	> 5000 mg/kg bw		Rabbit
		Mutagenicity	Negative	OECD 471	Salmonella typhimurium
	Genotoxicity - in vitro	Not genotoxic	OECD 473		
	NOAEL (oral)	316 mg/kg bw/d	OECD 408	Rat	
	NOAEL (dermal) - estimate	250 mg/kg bw/d	Read across	Rat	
	NOAEL (fertility) - estimate	365 mg/kg.d	Read across	Rat	
	NOAEL (development, oral)	1000 mg/kg bw/d	OECD 414	Rat	
	Skin irritation	Irritant		Rabbit	
	Eye irritation	Non-irritant		Rabbit	
	LC50 (inhalation) - estimate	> 5000 mg/m3		Rat	
	Coumarin	Skin sensitisation	Sensitizing.	OECD 429	Mouse
		Skin sensitisation	> 12500 ug/cm2	OECD 429	Mouse
NOAEL (development, oral)		> 115 mg/kg bw/d		Mouse	
Eye irritation		Non-irritant		Rabbit	
LD50 (oral)		680 mg/kg bw	-----	Rat	



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7-Hydroxycitronellal	NOAEL (oral)	> 138,3 mg/kg bw/d		Mouse
	Skin irritation	Non-irritant		Rabbit
	Genotoxicity - in vitro	Not genotoxic	OECD 476	
	Mutagenicity	Negative	OECD 471	Salmonella typhimurium
	Genotoxicity - in vivo	> 105 mg/kg bw/d	OECD 474	Mouse
	NOEL (carcinogenicity) - estimate	Not carcinogenic		
	Respiratory irritation	Irritant		
	LD50 (dermal)	> 2000 mg/kg bw	-----	Rabbit
	Skin sensitisation	5612 ug/cm ²	OECD 429	Mouse
	Skin irritation	850 ug/cm ²	OECD 404	
	Eye irritation	Irritant		
	Skin irritation	Non-irritant		
	LD50 (oral)	> 5000 mg/kg bw	-----	Rat
	NOEL (oral)	250 mg/kg bw/d		Mouse
Genotoxicity - in vivo	Not genotoxic			
NOEL (carcinogenicity) - estimate	Not carcinogenic			
Mutagenicity	Negative	OECD 471	Salmonella typhimurium	
Tetrahydro-2-isobutyl-4-methylpyran-4-ol, mixed isomers (cis and trans)	NOAEL (developmental toxicity, dermal)	> 1000 mg/kg bw/d	-----	Rat
	LD50 (oral)	> 5000 mg/kg bw	-----	Rat
	LD50 (dermal)	> 2000 mg/kg bw	-----	Rabbit
	Eye irritation	Irritant	-----	Rabbit
	Skin irritation	Non-irritant	-----	Rabbit
	Skin irritation	Non-irritant	Patch test	Human
	Genotoxicity - in vitro	Not genotoxic	OECD 473	-----
	Genotoxicity - in vivo	> 600 mg/kg bw/d	OECD 474	Mouse
	NOAEL (dermal)	> 1000 mg/kg bw/d	OECD 411	
	NOAEL (oral)	125 mg/kg bw/d	OECD 407	Rat
	Skin sensitisation	Not sensitizing	OECD 406	Guinea pig
	Mutagenicity	Negative	OECD 471	Salmonella typhimurium
	NOAEL (fertility, dermal)	> 1000 mg/kg bw/d		Rat
	lonone, methyl-	Skin sensitisation	5450 ug/cm ²	OECD 429
LD50 (oral)		> 5000 mg/kg bw	-----	Rat
LD50 (dermal)		> 5000 mg/kg bw		Rabbit
NOAEL (oral) - estimate		30 mg/kg bw/d	Read across	Rat
Genotoxicity - in vitro		Not genotoxic	OECD 476	Chinese Hamster
Mutagenicity		Negative	OECD 471	Salmonella typhimurium
Genotoxicity - in vivo		Not genotoxic	-----	Mouse
Skin irritation		Irritant	-----	Rat
Eye irritation - estimate		Irritant	Read across	Rabbit
NOAEL (fertility) - estimate		120 mg/kg.d	Read across	
NOAEL (development) - estimate		120 mg/kg.d	Read across	
NOEL (oral)		> 550 mg/kg bw/d		Rat
NOAEL (oral)		> 550 mg/kg bw/d		
LD50 (dermal)		> 5000 mg/kg bw	-----	Rabbit
LD50 (oral)	> 2840 mg/kg bw	-----	Rat	
NOEL (carcinogenicity) - estimate	Not carcinogenic	Read across		
NOAEL (dermal)	300 mg/kg bw/d	OECD 421	Rat	
Geraniol	NOEL (oral)	> 550 mg/kg bw/d		Rat
	NOAEL (oral)	> 550 mg/kg bw/d		
	LD50 (dermal)	> 5000 mg/kg bw	-----	Rabbit
	LD50 (oral)	> 2840 mg/kg bw	-----	Rat
	NOEL (carcinogenicity) - estimate	Not carcinogenic	Read across	
	NOAEL (dermal)	300 mg/kg bw/d	OECD 421	Rat



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Nerol	Genotoxicity - in vitro	Not genotoxic	OECD 476	Chinese Hamster	
	Genotoxicity - in vivo	Not genotoxic	OECD 474	Mouse	
	Mutagenicity	Negative	OECD 471	Salmonella typhimurium	
	NOAEL (developmental toxicity, dermal)	> 300 mg/kg bw/d	OECD 421	Rat	
	NOAEL (fertility, dermal)	> 300 mg/kg bw/d	OECD 421	Rat	
	Skin sensitisation	3525 ug/cm2	OECD 429	Mouse	
	Eye irritation	Irritant	OECD 405	Rabbit	
	Genotoxicity - in vitro	Not genotoxic	OECD 476	Mouse	
	Mutagenicity	Negative	OECD 471	Salmonella typhimurium	
	Genotoxicity - estimate	Not genotoxic	Read across		
	NOAEL (oral) - estimate	200 mg/kg bw/d	Read across	Rat	
	NOAEL (fertility, oral)	720 mg/kg bw/d	OECD 422	Rat	
	NOAEL (development, oral)	227,6 mg/kg bw/d	OECD 422	Rat	
	Geranyl acetate	Skin irritation	Moderately irritant	OECD 404	Rabbit
NOAEL (oral)		374 mg/kg bw/d	OECD 422	Rat	
LD50 (dermal)		> 5000 mg/kg bw	OECD 402	Rabbit	
LD50 (oral)		4500 mg/kg bw	OECD 401	Rat	
Skin irritation		Moderately irritant		Guinea pig	
Skin sensitisation		Sensitizing.	-----	-----	
NOEL (carcinogenicity) - estimate		> 2000 mg/kg.d	Read across	Rat	
NOAEL (dermal) - estimate		1000 mg/kg bw/d	Read across	Mouse	
LD50 (dermal)		> 5460 mg/kg bw		Rabbit	
LD50 (oral)		6330 mg/kg bw	-----	Rat	
Mutagenicity		Negative	OECD 471	-----	
LD50 (oral)		> 5000 mg/kg bw	OECD 401	Rat	
[3R-(3α,3aβ,6α,7β,8α)]-Octahydro-6-methoxy-3,6,8,8-tetramethyl-1H-3a,7-methanoazulene		LD50 (dermal)	> 5000 mg/kg bw	OECD 402	Rabbit
		LC50 (inhalation) - estimate	> 13000 mg/m3	Read across	
	LD50 (dermal)	> 5000 mg/kg bw	OECD 402	Rat	
	LD50 (oral)	2700 mg/kg bw	OECD 401	Rat	
	NOAEL (oral)	300 mg/kg bw/d	OECD 408	Rat	
	NOEL (carcinogenicity, oral)	250 mg/kg bw/d	OECD 453	Rat	
	Genotoxicity - in vitro	Not genotoxic	OECD 473	-----	
	Genotoxicity - in vivo	Not genotoxic	OECD 478	Mouse	
	Skin irritation	Slightly irritant	-----	Guinea pig	
	Eye irritation	Non-irritant	OECD 405	Rabbit	
	NOAEL (fertility, oral)	300 mg/kg bw/d	OECD 422	Rat	
	Skin sensitisation	Sensitizing.		Guinea pig	
	NOAEL (development, oral)	300 mg/kg bw/d	OECD 422	Rat	
	Mutagenicity	Negative	OECD 471	Salmonella typhimurium	
Alpha-methyl-1,3-benzodioxole-5-propionaldehyde	Skin sensitisation	4100 ug/cm2	OECD 429	-----	
	NOAEL (dermal)	> 300 mg/kg bw/d	-----	Rat	
	NOAEL (development, oral)	> 500 mg/kg bw/d		Rat	



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Citronellol	Skin irritation	Non-irritant	-----	Rat	
	LD50 (oral)	3600 mg/kg bw	-----	Rabbit	
	LD50 (dermal)	> 2000 mg/kg bw	-----		
	Skin irritation	Non-irritant			
	NOAEL (fertility, oral)	100 mg/kg bw/d	OECD 422	Rat	
	Genotoxicity - in vitro	Not genotoxic			
	Skin sensitisation	10875 ug/cm2	OECD 429	Mouse	
	Mutagenicity	Not mutagenic	OECD 471	Salmonella typhimurium	
	NOAEL (oral)	> 50 mg/kg bw/d		Rat	
	Skin irritation	Moderately irritant		Rabbit	
	LD50 (oral)	3450 mg/kg bw	-----	Rat	
	LD50 (dermal)	2650 mg/kg bw		Rabbit	
	NOAEL (fertility, dermal)	300 mg/kg bw/d	OECD 421	Rat	
	NOAEL (developmental toxicity, dermal)	> 300 mg/kg bw/d	OECD 421	Rat	
3-p-Cumenyl-2-methylpropionaldehyde	Skin irritation	Moderately irritant	Patch test	Human	
	Eye irritation	Moderately irritant		Rabbit	
	Skin sensitisation	5575 ug/cm2	OECD 429	Mouse	
	NOAEL (oral)	300 mg/kg bw/d		Rabbit	
	Skin irritation	Slightly irritant		Rabbit	
	LD50 (oral)	3810 mg/kg bw	-----	Rat	
	NOAEL (fertility, oral)	25 mg/kg bw/d	OECD 415	Rat	
	Mutagenicity	Negative	OECD 471	Salmonella typhimurium	
	Genotoxicity - in vivo	> 2000 mg/kg bw/d	Read across	Mouse	
	Eye irritation	Non-irritant		Rabbit	
	LD50 (dermal)	> 5000 mg/kg bw	-----	Rat	
	LD50 (oral)	> 5000 mg/kg bw	OECD 401	Rat	
	LD50 (dermal)	> 5000 mg/kg bw	OECD 402	Rat	
	Skin irritation	Non-irritant	OECD 439		
Methyl 2,4-dihydroxy-3,6-dimethylbenzoate	Eye irritation	Non-irritant	OECD 405	Rabbit	
	NOAEL (oral)	> 717 mg/kg bw/d	OECD 422	Rat	
	Mutagenicity	Negative	OECD 471	Salmonella typhimurium	
	Genotoxicity - in vitro	Positive	OECD 473	-----	
	NOAEL (fertility, oral)	> 1000 mg/kg bw/d	OECD 422	Rat	
	NOAEL (development, oral)	> 1000 mg/kg bw/d	OECD 422	Rat	
	NOEL (carcinogenicity) - estimate	Not carcinogenic			
	LD50 (oral)	> 2000 mg/kg bw	-----		
	2-(2,2,7,7-Tetremethyltricyclo[6.2.1.0((1,6)undec-5 and 4-en-5-yl)propan-1-ol	LD50 (dermal)	> 2000 mg/kg bw	-----	
		LD50 (dermal)	> 5000 mg/kg bw	-----	Rabbit
		NOAEL (oral)	382,3 mg/kg bw/d	OECD 408	Rat
		Mutagenicity	Negative	OECD 471	Salmonella typhimurium
		Genotoxicity - in vivo	Not genotoxic	OECD 474	Mouse
		Eye irritation	Irritant		Rabbit
LD50 (oral)		> 4230 mg/kg bw	-----	Rat	
Skin irritation - estimate		Irritant	Read across	Rabbit	
Skin sensitisation		Sensitizing.	OECD 429	Mouse	
LD50 (oral)		> 2000 mg/kg bw	OECD 423	Rat	
LD50 (dermal)		> 2000 mg/kg bw		Rabbit	
Undec-10-enal		LD50 (oral)	> 2000 mg/kg bw	OECD 423	Rat
		LD50 (dermal)	> 2000 mg/kg bw		Rabbit
		LD50 (dermal)	> 5000 mg/kg bw	-----	
	NOAEL (oral)	382,3 mg/kg bw/d	OECD 408	Rat	
	Mutagenicity	Negative	OECD 471	Salmonella typhimurium	
	Genotoxicity - in vivo	Not genotoxic	OECD 474	Mouse	
	Eye irritation	Irritant		Rabbit	
	LD50 (oral)	> 4230 mg/kg bw	-----	Rat	
	Skin irritation - estimate	Irritant	Read across	Rabbit	
	Skin sensitisation	Sensitizing.	OECD 429	Mouse	
	LD50 (oral)	> 2000 mg/kg bw	OECD 423	Rat	
	LD50 (dermal)	> 2000 mg/kg bw		Rabbit	
	Reaction mass of 2-methylbutyl salicylate and isopentyl salicylate	LD50 (oral)	> 2000 mg/kg bw	OECD 423	Rat
		LD50 (dermal)	> 2000 mg/kg bw		Rabbit



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Trans-delta-damascone	Skin irritation	Non-irritant	OECD 439	Human
	Eye irritation	Non-irritant	OECD 492	Human
	Skin sensitisation	Sensitizing.	OECD 442B	Mouse
	NOAEL (fertility) - estimate	75 mg/kg.d	Read across	Rat
	Mutagenicity	Negative	OECD 471	Salmonella typhimurium
	Genotoxicity - in vivo	Not genotoxic	OECD 474	Mouse
	NOAEL (oral) - estimate	46 mg/kg bw/d	Read across	Rat
	LD50 (dermal) - estimate	> 5000 mg/kg bw	Read across	
	Genotoxicity - in vivo	Not genotoxic	OECD 474	Mouse
	Skin irritation	Irritant		
Reaction mass of 1-(3,3-dimethylcyclohex-1-en-1-yl)pent-4-en-1-one and 1-(5,5-dimethylcyclohex-1-en-1-yl)pent-4-en-1-one	Skin sensitisation - estimate	Sensitizing.		
	LD50 (oral)	1400 mg/kg bw	-----	Mouse
	NOAEL (oral) - estimate	30 mg/kg bw/d	Read across	Rat
	Genotoxicity - in vitro	Not genotoxic		
	Mutagenicity	Negative	OECD 471	Salmonella typhimurium
	Eye irritation	Non-irritant		
	NOAEL (development) - estimate	> 30 mg/kg.d	Read across	Rat
	LD50 (oral)	> 2000 mg/kg bw	OECD 401	Rat
	LD50 (dermal)	> 2000 mg/kg bw	OECD 402	Rabbit
	4-Hydroxy-2,5-dimethylfuran-2(3H)-one	LD50 (oral)	1660 mg/kg bw	OECD 401

11.2. Information on other hazards

Endocrine disrupting properties : This product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Regulation (EU) 2017/2100 or Regulation (EU) 2018/605 at levels of 0.1% or higher.

Other information : Not applicable.

SECTION 12 ECOLOGICAL INFORMATION

*

12.1. Toxicity

No ecotoxicological research has been carried out on this product.

Ecotoxicity : Harmful to aquatic organisms. Calculated LC50 (fish): 7 mg/l. Calculated EC50 (waterflea): 9 mg/l. Contains 0 % of components with unknown hazards to the aquatic environment.

12.2. Persistence and degradability

Persistence – degradability : May cause long-term adverse effects in the aquatic environment.

12.3. Bioaccumulative potential

Bioaccumulative potential : Contains bioaccumulating substances.

12.4. Mobility in soil

Mobility : Adsorbs to soil and has low mobility.



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12.5. Results of PBT and vPvB assessment

PBT/vPvB assessment : Does not contain PBT or vPvB substances in concentrations higher than 0,1%.

12.6. Endocrine disrupting properties

Endocrine disrupting properties : This product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Regulation (EU) 2017/2100 or Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7. Other adverse effects

Other adverse effects : Not applicable.

Ecological information:

Chemical name	Property		Method	Test animal
Benzyl acetate	LC50 (fish)	4 mg/l		Oryzias latipes
	NOEC (fish)	1,33 mg/l.d		Oryzias latipes
	EC50 (waterflea)	17 mg/l	OECD 202	Daphnia magna
	IC50 (algae)	110 mg/l	OECD 201	Desmodesmus subspicatus
	Ultimate aerobic biodegradation (%)	99,7 %	OECD 301 B	
	NOEC (waterflea) - acute	10 mg/l	OECD 202	Daphnia magna
	Log P(ow)	1,96		
Benzyl salicylate	IC50 (algae)	1,29 mg/l	OECD 201	Selenastrum capricornutum
	NOEC (algae)	0,502 mg/l	OECD 201	Selenastrum capricornutum
	LC50 (fish)	1,03 mg/l	EU Method C.1	Brachydanio rerio
	Ultimate aerobic biodegradation (%)	93 %	OECD 301 F	
	EC50 (waterflea)	1,16 mg/l	OECD 202	Daphnia magna
3-Methyl-4-(2,6,6-trimethyl-2-cyclohexen-1-yl)-3-buten-2-one	Log P(ow)	4,0		
	LC50 (fish)	10,9 mg/l	OECD 203	Oncorhynchus mykiss
	Ultimate aerobic biodegradation (%)	61,8 %	OECD 301 B	
	EC50 (waterflea) - estimate	3,04 mg/l	-----	Daphnia magna
	EC50 (waterflea)	4,7 mg/l	OECD 202	Daphnia magna
	IC50 (algae)	> 20 mg/l	OECD 201	Desmodesmus subspicatus
	Log P(ow)	4,288		
Coumarin	EC50 (waterflea)	13,5 mg/l		Daphnia magna
	LC50 (fish)	56 mg/l		Poecilia reticulata
	Ultimate aerobic biodegradation (%)	90 %	OECD 301 F	
	Log P(ow)	1,39		
Ionone, methyl-	IC50 (algae)	> 9,42 mg/l	OECD 201	Scenedesmus subspicatus
	LC50 (fish)	> 1,57 mg/l	OECD 203	Brachydanio rerio
	EC50 (waterflea)	3,7 mg/l	OECD 202	Daphnia magna
	EC0 (waterflea)	2,42 mg/l	OECD 202	Daphnia magna
	EC100 (waterflea)	9,41 mg/l	OECD 202	Daphnia magna



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[3R-(3α,3aβ,6α,7β,8α)]-Octahydro-6-methoxy-3,6,8,8-tetramethyl-1H-3a,7-methanoazulene	Ultimate aerobic biodegradation (%)	76 %	OECD 301 F	
	Log P(ow)	4,39		
	BCF	586		
	LC50 (fish)	0,43 mg/l	OECD 203	Cyprinus carpio
	EC50 (waterflea)	0,48 mg/l	OECD 202	Daphnia magna
2-(2,2,7,7-Tetremethyltricyclo[6.2.1.0((1,6)]undec-5 and 4-en-5-yl)propan-1-ol	IC50 (algae)	> 1,8 mg/l	OECD 201	Pseudokirchnerella subcapitata
	Ultimate aerobic biodegradation (%)	60 %	OECD 301 D	-----
	LC50 (fish)	0,3 mg/l	-----	Cyprinus carpio
	IC50 (algae)	> 0,44 mg/l	-----	Pseudokirchnerella subcapitata
	EC50 (waterflea)	> 0,26 mg/l	-----	Daphnia magna
Trans-delta-damascone	Ultimate aerobic biodegradation (%)	1 %	-----	
	Log P(ow)	6,3		
	LC50 (fish)	0,97 mg/l	OECD 203	Cryzias latipes
	NOEC (waterflea) - chronic	0,35 mg/l.d	OECD 211	Daphnia magna
	Log P(ow)	4,2		

SECTION 13 DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

- Product residues : Do not dispose empty pack with waste produced by households. Containers may be recycled. Treat product residues, impregnated wipes and non-empty pack as hazardous waste.
- Additional warning : None.
- Waste water discharge : Do not dispose of into the environment, drains, sewers or water courses.
- European waste catalogue : Dispose hazardous waste in accordance with Directive 91/689/EEC under acknowledgement of a waste code according to Commission Decision 2000/532/EC to an official chemical waste depot.
- Local legislation : Disposal should be in accordance with applicable regional, national, and local laws and regulations. Local regulations may be more stringent than regional or national requirements and must be complied with.

SECTION 14 TRANSPORT INFORMATION

14.1. UN number or ID number

UN nr. : None.

14.2. UN proper shipping name

Transport name : Not regulated.

14.3/14.4/14.5. Transport hazard class(es)/Packing group/Environmental hazards

ADR/RID/ADN (road/railway/inland waterways)

Class : This product is not classified according to ADR/RID/ADN.

IMDG (sea)



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Class : This product is not classified according to IMDG.
Marine pollutant : No

IATA (air)
Class : This product is not classified according to IATA.

14.6. Special precautions for user

Other information : Country specific variations may apply.

14.7. Maritime transport in bulk according to IMO instruments

Marpol : Not intended to be carried in bulk according to International Maritime Organisation (IMO) instruments. Packaged liquids are not considered bulk.

SECTION 15 REGULATORY INFORMATION

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

Community regulations : Regulation (EU) No 2020/878 (REACH), Regulation (EC) No 1272/2008 (CLP) and other regulations. Directive 2008/98/EC (waste).

15.2. Chemical safety assessment

Chemical safety assessment : Not applicable.

SECTION 16 OTHER INFORMATION

16.1. Other information

The information in this safety data sheet is compiled in compliance with Regulation (EU) No 2020/878 dated 18 June 2020 and accurate to the best of our knowledge and experience at the date of issue specified. It is the user's obligation to use this product safely and to comply with all applicable laws and regulations concerning the use of the product. This safety data sheet complements the technical information sheets but does not replace them and offers no warranty with regard to product properties.

Users are also forewarned for any hazards involved when the product is used for other purposes than those for which it is designed.

Changed or new information with regard to the previous release is indicated with an asterisk (*).

List of abbreviations and acronyms that could be used (but not necessarily are used) in this safety data sheet:

ADR : European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE : Acute Toxicity Estimate
CLP : Classification, Labeling & Packaging
CMR : Carcinogenic, Mutagenic or toxic for Reproduction
EEC : European Economic Community
GHS : Globally Harmonized System of Classification and Labelling of Chemicals
IATA : International Air Transport Association
IBC code : The IMO International Code for construction and equipment of ships carrying dangerous chemicals in bulk.
IMDG : International Maritime Dangerous Goods Code
LD50/LC50 : Lethal Dose/Concentration for 50% of a population
MAC : Maximum Allowable Concentration
MARPOL : International Convention for the Prevention of Pollution From Ships
NO(A)EL : No Observed (Adverse) Effect Level
OECD : Organisation for Economic Co-operation and Development
PBT : Persistent, Bioaccumulative and Toxic



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PC	: Chemical product category
PT	: Product type
REACH	: Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	: Regulations concerning the International Carriage of Dangerous Goods by Rail
STP	: Sewage Treatment Plant
SU	: Sector of Use
TWA/STEL	: Time-Weighted Average/Short Term Exposure Limit
UN	: United Nations
UFI	: Unique formula identifier
VOC	: Volatile Organic Compounds
vPvB	: Very Persistent and Very Bioaccumulative

Key data used to compile the Safety Data Sheet are from, but not limited to, one or more sources of information e.g. toxicological data from material suppliers, CONCAWE, IFRA, CESIO, Regulation EG 1272/2008, etc.

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008:

Eye Irrit. 2	: Calculation method.
Skin Sens. 1/1A/1B	: Calculation method.
Aquatic Chronic 3	: Calculation method.

Full text of hazard classes mentioned in section 3:

Acute Tox. 4	: Acute toxicity, category 4.
Skin Corr. 1A/B/C	: Skin corrosive, category 1A/B/C.
Skin Irrit. 2	: Skin irritation, category 2.
Eye Dam. 1	: Serious eye damage, category 1.
Eye Irrit. 2	: Eye irritation, category 2.
Skin Sens. 1/1A/1B	: Skin sensitization, category 1/1A/1B.
Repr. 2	: Reproductive toxicity, category 2.
Aquatic Chronic 1	: Hazardous to the aquatic environment — Chronic category 1.
Aquatic Chronic 2	: Hazardous to the aquatic environment — Chronic category 2.
Aquatic Chronic 3	: Hazardous to the aquatic environment — Chronic category 3.
Aquatic Acute 1	: Hazardous to the aquatic environment — Acute category 1.

Full text of H-phrases mentioned in section 3:

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H361	Suspected of damaging fertility or the unborn child.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Advice on any training appropriate for workers: none.

Country / Language code	: EC / EN
Number format	: "," used as decimal separator.

End of safety data sheet.

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