

MERLIN'S BEARD FO-0135

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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

1.1. Product identifier

Product form	: Mixture
Product name	: MERLIN'S BEARD FO-0135
UFI	: FV0U-W38P-800K-8RGP
Product code	: FO-0135
Type of product	: Perfumes, fragrances
Product group	: Trade product

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

1.2.1. Relevant identified uses

Main use category	: Industrial use, Professional use
Industrial/Professional use spec	: For professional use only Industrial
Use of the substance/mixture	: Perfumes, fragrances
Function or use category	: Odour agents

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Fragrance Orchard

Neutrino,
Albert Road,
Essex CM7 3JQ
GB - United Kingdom

1.4. Emergency telephone number

Emergency number	: +44 (0) 1376 555185
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 2	H319
Skin sensitisation, Category 1	H317
Hazardous to the aquatic environment – Chronic Hazard, Category 2	H411

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

Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice. May cause an allergic skin reaction. Causes serious eye irritation. Toxic to aquatic life with long lasting effects. Causes skin irritation.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



Signal word
(CLP) Contains

: Warning
: Iso E Super, Eugenol, Vertenex, Amyl cinnamic aldehyde, Cinnamic aldehyde, Hexyl salicylate, Orange Oil, COUMARIN, Heliotropine, Eucalyptus oil, Linalool, beta-Caryophyllene, Aldehyde C-16, Acetyl Propionyl

Hazard statements (CLP)

: 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 (CLP)

: P264 - Wash hands, forearms and face thoroughly after handling.
P272 - Contaminated work clothing should not be allowed out of the workplace.
P273 - Avoid release to the environment.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical advice/attention.

2.3. Other hazards

Contains no PBT/vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Iso E Super	CAS-No.: 54464-57-2 EC-No.: 259-174-3 REACH-no: 01-2119489989-04	6.84 – 13.68	Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 1, H410
Benzyl benzoate	CAS-No.: 120-51-4 EC-No.: 204-402-9 EC Index-No.: 607-085-00-9 REACH-no: 01-2119976371-33	4.73 – 9.46	Acute Tox. 4 (Oral), H302 Aquatic Acute 1, H400 Aquatic Chronic 2, H411
Eugenol	CAS-No.: 97-53-0 EC-No.: 202-589-1 REACH-no: 01-2119971802-33	2.805 – 5.7	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Skin Sens. 1B, H317
Vertenex	CAS-No.: 32210-23-4 EC-No.: 250-954-9 REACH-no: 01-2119976286-24	2.49 – 4.98	Skin Sens. 1B, H317
Ethyl vanillin	CAS-No.: 121-32-4 EC-No.: 204-464-7 REACH-no: 01-211958961-24	2.31 – 4.62	Eye Irrit. 2, H319

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Amyl cinnamic aldehyde	CAS-No.: 122-40-7 EC-No.: 204-541-5;453-530-3	2.1 – 4.2	Skin Sens. 1B, H317 Aquatic Chronic 2, H411
Cinnamic aldehyde	CAS-No.: 104-55-2 EC-No.: 203-213-9 REACH-no: 01-2119935242-45	2.049 – 4.116	Acute Tox. 4 (Dermal), H312 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 3, H412
Hexamethylindanopyran	CAS-No.: 1222-05-5 EC-No.: 214-946-9 EC Index-No.: 603-212-00-7 REACH-no: 01-2119488227-29	1.845 – 3.69	Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2-Isobutyl-4-methyltetrahydro-2H-pyran-4-ol	CAS-No.: 63500-71-0 EC-No.: 405-040-6 EC Index-No.: 603-101-00-3 REACH-no: 01-000015458-64	0.87 – 3.48	Eye Irrit. 2, H319
GAMMA-OCTALACTONE	CAS-No.: 104-50-7 EC-No.: 203-208-1 REACH-no: 01-2120793635-41	1.2 – 2.4	Skin Irrit. 2, H315
Orange Oil	CAS-No.: 8028-48-6 EC-No.: 232-433-8	1.17 – 2.34	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
COUMARIN	CAS-No.: 91-64-5 EC-No.: 202-086-7 REACH-no: 01-2119943756-26	0.96 – 1.92	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 Skin Sens. 1, H317 Aquatic Chronic 2, H411
Oxypheylon (Raspberry ketone) crystals	CAS-No.: 5471-51-2 EC-No.: 226-806-4	0.93 – 1.86	Acute Tox. 4 (Oral), H302
Vanillin	CAS-No.: 121-33-5 EC-No.: 204-465-2 REACH-no: 01-2119516040-60	0.9 – 1.8	Eye Irrit. 2, H319
Dihydromyrcenol	CAS-No.: 18479-58-8 EC-No.: 242-362-4 REACH-no: 01-2119457274-37	0.75 – 1.5	Skin Irrit. 2, H315 Eye Irrit. 2, H319
Aldehyde C-14	CAS-No.: 104-67-6 EC-No.: 203-225-4 REACH-no: 01-2119959333-34	0.66 – 1.32	Aquatic Chronic 3, H412
Patchouli oil	CAS-No.: 8014-09-3 EC Index-No.: 616-944-7	0.6 – 1.2	Asp. Tox. 1, H304 Aquatic Chronic 2, H411
2-Methyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol	CAS-No.: 28219-60-5 EC-No.: 248-907-2	0.54 – 1.08	Eye Irrit. 2, H319 Aquatic Acute 1, H400 Skin Irrit. 2, H315

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Cedarwood oil, Texas	CAS-No.: 68990-83-0 EC-No.: 294-461-7	0.54 – 1.08	Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Heliotropine	CAS-No.: 120-57-0 EC-No.: 204-409-7 REACH-no: 01-2119983608-21	0.18 – 0.36	Skin Sens. 1B, H317
Eucalyptus oil	CAS-No.: 8000-48-4 EC-No.: 283-406-2;286-249-8;616-775-9 REACH-no: 01-2119978250-37	0.18 – 0.36	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
Hexyl salicylate	CAS-No.: 6259-76-3 EC-No.: 228-408-6	0.0174 – 0.348	Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
beta-Caryophyllene	CAS-No.: 87-44-5 EC-No.: 201-746-1 REACH-no: 01-2120745237-53	0.099 – 0.288	Skin Sens. 1B, H317 Asp. Tox. 1, H304
Linalool	CAS-No.: 78-70-6 EC-No.: 201-134-4 EC Index-No.: 603-235-00-2 REACH-no: 01-2119474016-42	0.12 – 0.2436	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317
Aldehyde C-16	CAS-No.: 77-83-8 EC-No.: 201-061-8 REACH-no: 01-2119967770-28	0.12 – 0.24	Skin Sens. 1B, H317 Aquatic Chronic 2, H411
acetyl propionyl	CAS-No.: 600-14-6 EC-No.: 209-984-8	0.06 – 0.12	Flam. Liq. 2, H225 Eye Dam. 1, H318 Skin Sens. 1B, H317 STOT RE 2, H373

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

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after skin contact	: Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Eye irritation.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Carbon dioxide. Water spray. Dry powder. Foam.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting : Complete protective clothing. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.
Methods for cleaning up : Take up liquid spill into absorbent material.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray. Wear personal protective equipment.
Hygiene measures : Always wash hands after handling the product. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep cool. Store in a well-ventilated place.
Storage temperature : 25 °C
Storage area : Store in a well-ventilated place. Store away from heat.
Special rules on packaging : Store in a closed container.
Packaging materials : Do not store in corrodable metal.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

acetyl propionyl (600-14-6)	
Germany - Occupational Exposure Limits (TRGS 900)	
AGW (OEL TWA) [1]	0.083 mg/m ³
AGW (OEL TWA) [2]	0.02 ppm
Chemical category	Skin notation, Skin sensitization
Slovenia - Occupational Exposure Limits	
OEL TWA	0.083 mg/m ³
OEL TWA [ppm]	0.02 ppm
OEL STEL	0.083 mg/m ³
OEL STEL [ppm]	0.02 ppm
OEL chemical category	Potential for cutaneous absorption
Switzerland - Occupational Exposure Limits	
MAK (OEL TWA) [1]	0.08 mg/m ³
MAK (OEL TWA) [2]	0.02 ppm
KZGW (OEL STEL)	0.16 mg/m ³
KZGW (OEL STEL) [ppm]	0.04 ppm
OEL chemical category	Sensitizer, Skin notation

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls: Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Safety glasses

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: light yellow. amber.
Odour	: characteristic. characteristic.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 93 °C (closed cup) ASTM D7094
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: No data available
Relative vapour density at 20°C	: No data available
Relative density	: ≈ 1
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information**11.1 Information on toxicological effects**

Acute toxicity (oral) : Not classified
 Acute toxicity (dermal) : Not classified
 Acute toxicity (inhalation) : Not classified

Benzyl benzoate (120-51-4)

LD50 oral rat	500 mg/kg
LD50 oral	1500 mg/kg bodyweight
LD50 dermal rabbit	4000 mg/kg
LD50 dermal	4000 mg/kg bodyweight
ATE CLP (oral)	500 mg/kg bodyweight
ATE CLP (dermal)	4000 mg/kg bodyweight

Eugenol (97-53-0)

LD50 oral rat	1930 mg/kg
LD50 oral	2500 mg/kg bodyweight
ATE CLP (oral)	1930 mg/kg bodyweight

Vertenex (32210-23-4)

LD50 oral rat	5 g/kg
LD50 oral	3370 mg/kg bodyweight
LD50 dermal rabbit	> 5000 mg/kg
ATE CLP (oral)	5000 mg/kg bodyweight

Ethyl vanillin (121-32-4)

LD50 oral rat	1590 mg/kg
LD50 oral	3000 mg/kg bodyweight
LD50 dermal rat	> 2000 mg/kg

Amyl cinnamic aldehyde (122-40-7)

LD50 oral rat	3730 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
ATE CLP (oral)	3730 mg/kg bodyweight

Cinnamic aldehyde (104-55-2)

LD50 oral rat	2220 mg/kg
LD50 oral	2200 mg/kg bodyweight

Cinnamic aldehyde (104-55-2)	
LD50 dermal rabbit	1260 mg/kg
LD50 dermal	1100 mg/kg bodyweight
ATE CLP (oral)	2220 mg/kg bodyweight
ATE CLP (dermal)	1260 mg/kg bodyweight
Hexamethylindanopyran (1222-05-5)	
LD50 oral rat	> 3250 mg/kg
LD50 dermal rabbit	> 3250 mg/kg
2-Isobutyl-4-methyltetrahydro-2H-pyran-4-ol (63500-71-0)	
LD50 dermal rabbit	> 2000 mg/kg
Hexyl salicylate (6259-76-3)	
LD50 oral rat	> 5 g/kg
LD50 dermal rabbit	> 5000 mg/kg
GAMMA-OCTALACTONE (104-50-7)	
LD50 oral rat	4400 mg/kg
LD50 oral	4400 mg/kg bodyweight
LD50 dermal rabbit	> 5000 mg/kg
ATE CLP (oral)	4400 mg/kg bodyweight
Orange Oil (8028-48-6)	
LD50 dermal rabbit	> 5000 mg/kg
COUMARIN (91-64-5)	
LD50 oral rat	> 5000 mg/kg
LD50 oral	500 mg/kg bodyweight
LD50 dermal rat	293 mg/kg
ATE CLP (oral)	100 mg/kg bodyweight
ATE CLP (dermal)	293 mg/kg bodyweight
ATE CLP (gases)	700 ppmv/4h
ATE CLP (vapours)	3 mg/l/4h
ATE CLP (dust,mist)	0.5 mg/l/4h
Oxypheylon (Raspberry ketone) crystals (5471-51-2)	
LD50 oral rat	1320 mg/kg
LD50 dermal rat	> 2000 mg/kg
ATE CLP (oral)	1320 mg/kg bodyweight
Vanillin (121-33-5)	
LD50 dermal rabbit	> 5010 mg/kg
LD50 dermal	2600 mg/kg bodyweight
Dihydromyrcenol (18479-58-8)	
LD50 oral rat	3600 mg/kg

Dihydromyrcenol (18479-58-8)	
LD50 oral	3600 mg/kg bodyweight
LD50 dermal rabbit	> 5 g/kg
ATE CLP (oral)	3600 mg/kg bodyweight
Aldehyde C-14 (104-67-6)	
LD50 oral rat	18500 mg/kg
LD50 dermal rat	> 2000 mg/kg
ATE CLP (oral)	18500 mg/kg bodyweight
Patchouli oil (8014-09-3)	
LD50 oral rat	> 5 g/kg
Heliotropine (120-57-0)	
LD50 oral rat	2700 mg/kg
LD50 oral	2700 mg/kg bodyweight
LD50 dermal rat	> 5000 mg/kg
ATE CLP (oral)	2700 mg/kg bodyweight
Eucalyptus oil (8000-48-4)	
LD50 oral rat	2480 mg/kg
ATE CLP (oral)	2480 mg/kg bodyweight
Linalool (78-70-6)	
LD50 oral	2790 mg/kg bodyweight
Aldehyde C-16 (77-83-8)	
LD50 oral rat	5470 mg/kg
LD50 dermal rat	> 2000 mg/kg
ATE CLP (oral)	5470 mg/kg bodyweight
acetyl propionyl (600-14-6)	
LD50 oral rat	3 g/kg
LD50 oral	3000 mg/kg bodyweight
LD50 dermal rabbit	> 2000 mg/kg
LD50 dermal	2500 mg/kg bodyweight
ATE CLP (oral)	3000 mg/kg bodyweight
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Eugenol (97-53-0)	
IARC group	3 - Not classifiable
COUMARIN (91-64-5)	
IARC group	3 - Not classifiable
Reproductive toxicity	: Not classified

STOT-single exposure : Not classified
STOT-repeated exposure : Not classified

acetyl propionyl (600-14-6)

STOT-repeated exposure : May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment. Toxic to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute) : Not classified
Hazardous to the aquatic environment, long-term (chronic) : Toxic to aquatic life with long lasting effects.

Benzyl benzoate (120-51-4)

LC50 - Fish [1] : 2.32 mg/l (Exposure time: 96 h - Species: Danio rerio [semi-static])

NOEC (chronic) : 0.168 mg/l

Eugenol (97-53-0)

LC50 - Fish [1] : 13 mg/l (Exposure time: 96 h - Species: Danio rerio [semi-static])

Vertenex (32210-23-4)

LC50 - Fish [1] : 8.6 mg/l (Exposure time: 96 h - Species: Cyprinus carpio [semi-static])

Ethyl vanillin (121-32-4)

LC50 - Fish [1] : 81.4 – 94.3 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])

Hexamethylindanopyran (1222-05-5)

LC50 - Fish [1] : 0.452 mg/l Wolf, 1996d-27682

LC50 - Other aquatic organisms [1] : > 0.14 mg/l REACH DOSSIER Pimephales promelas

EC50 - Crustacea [2] : 260 µg/l REACH Dossier

EC50 - Other aquatic organisms [1] : 0.131 mg/l REACH Dossier

Vanillin (121-33-5)

LC50 - Fish [1] : 53 – 61.3 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])

LC50 - Fish [2] : 88 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])

NOEC (acute) : 10000 mg/kg (Exposure time: 42 Days - Species: Eisenia foetida [soil dry weight])

Aldehyde C-14 (104-67-6)

LC50 - Fish [1] : 569 mg/l 96 h

EC50 - Crustacea [1] : 5.85 mg/l 48 h

EC50 - Other aquatic organisms [1] : 5.94 mg/l 72 h

Heliotropine (120-57-0)

LC50 - Fish [1] : 2.5 mg/l (Exposure time: 96 h - Species: Cyprinus carpio [static])

Linalool (78-70-6)

EC50 96h - Algae [1] : 88.3 mg/l (Species: Desmodesmus subspicatus)

Aldehyde C-16 (77-83-8)

LC50 - Fish [1]	4.2 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [semi-static])
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12.2. Persistence and degradability

Benzyl benzoate (120-51-4)

Persistence and degradability	May cause long-term adverse effects in the environment.
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Cedarwood oil, Texas (68990-83-0)

Persistence and degradability	Not established.
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Eucalyptus oil (8000-48-4)

Persistence and degradability	Not established.
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12.3. Bioaccumulative potential

Benzyl benzoate (120-51-4)

Partition coefficient n-octanol/water (Log Pow)	3.97 (at 25 °C)
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Bioaccumulative potential	Not established.
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Eugenol (97-53-0)

Partition coefficient n-octanol/water (Log Pow)	1.83 (at 30 °C (at pH 5.5))
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Vertenex (32210-23-4)

Partition coefficient n-octanol/water (Log Pow)	4.8 (at 25 °C)
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Ethyl vanillin (121-32-4)

Partition coefficient n-octanol/water (Log Pow)	1.61 (at 25 °C)
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Amyl cinnamic aldehyde (122-40-7)

Partition coefficient n-octanol/water (Log Pow)	2.498 (at 25 °C (at pH 6.2))
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Cinnamic aldehyde (104-55-2)

Partition coefficient n-octanol/water (Log Pow)	2.1065 (at 25 °C)
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Hexamethylindanopyran (1222-05-5)

BCF - Fish [1]	(1618 dimensionless (whole body w.w.))
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Partition coefficient n-octanol/water (Log Pow)	5.3 (at 25 °C (at pH 7))
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2-Isobutyl-4-methyltetrahydro-2H-pyran-4-ol (63500-71-0)

Partition coefficient n-octanol/water (Log Pow)	1.65 (at 23 °C (at pH >6.09-<6.74))
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Hexyl salicylate (6259-76-3)

Partition coefficient n-octanol/water (Log Pow)	5.5 (at 30 °C (at pH 7))
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GAMMA-OCTALACTONE (104-50-7)

Partition coefficient n-octanol/water (Log Pow)	1.89 (at 25 °C (at pH 6.4))
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Oxyphylon (Raspberry ketone) crystals (5471-51-2)

Partition coefficient n-octanol/water (Log Pow)	1.33 (at 20 °C)
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Vanillin (121-33-5)

Partition coefficient n-octanol/water (Log Pow)	1.23 (at 22 °C)
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Dihydromyrcenol (18479-58-8)	
Partition coefficient n-octanol/water (Log Pow)	3.25 (at 40 °C (at pH 7)
Aldehyde C-14 (104-67-6)	
Partition coefficient n-octanol/water (Log Pow)	3.6 (at 25 °C)
Cedarwood oil, Texas (68990-83-0)	
Bioaccumulative potential	Not established.
Heliotropine (120-57-0)	
Partition coefficient n-octanol/water (Log Pow)	1.2 (at 35 °C)
Eucalyptus oil (8000-48-4)	
Bioaccumulative potential	Not established.
beta-Caryophyllene (87-44-5)	
Partition coefficient n-octanol/water (Log Pow)	6.23 (at 25 °C (at pH 7)
Aldehyde C-16 (77-83-8)	
Partition coefficient n-octanol/water (Log Pow)	2.4 (at 25 °C (cis isomer)

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

14.1 UN number

UN-No. (ADR)	: UN 3082
UN-No. (IMDG)	: UN 3082
UN-No. (IATA)	: UN 3082
UN-No. (ADN)	: UN 3082
UN-No. (RID)	: UN 3082

14.2. UN proper shipping name

Proper Shipping Name (ADR)	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper Shipping Name (IMDG)	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper Shipping Name (IATA)	: Environmentally hazardous substance, liquid, n.o.s.
Proper Shipping Name (ADN)	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper Shipping Name (RID)	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport document description (ADR)	: UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ISO E SUPER), 9, III, (-)

Transport document description (IMDG)	: UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ISO E SUPER), 9, III, MARINE POLLUTANT
Transport document description (IATA)	: UN 3082 Environmentally hazardous substance, liquid, n.o.s. (ISO E SUPER), 9, III
Transport document description (ADN)	: UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ISO E SUPER), 9, III
Transport document description (RID)	: UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ISO E SUPER), 9, III

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR)	: 9
Danger labels (ADR)	: 9



IMDG

Transport hazard class(es) (IMDG)	: 9
Danger labels (IMDG)	: 9



IATA

Transport hazard class(es) (IATA)	: 9
Danger labels (IATA)	: 9



ADN

Transport hazard class(es) (ADN)	: 9
Danger labels (ADN)	: 9



RID

Transport hazard class(es) (RID)	: 9
Danger labels (RID)	: 9



14.4. Packing group

Packing group (ADR)	: III
Packing group (IMDG)	: III
Packing group (IATA)	: III
Packing group (ADN)	: III
Packing group (RID)	: III

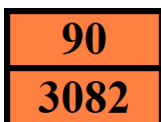
14.5. Environmental hazards

Dangerous for the environment	: Yes
Marine pollutant	: Yes
Other information	: No supplementary information available

14.6. Special precautions for user

Overland transport

Classification code (ADR)	: M6
Special provisions (ADR)	: 274, 335, 375, 601
Limited quantities (ADR)	: 5I
Excepted quantities (ADR)	: E1
Packing instructions (ADR)	: P001, IBC03, LP01, R001
Special packing provisions (ADR)	: PP1
Mixed packing provisions (ADR)	: MP19
Portable tank and bulk container instructions (ADR)	: T4
Portable tank and bulk container special provisions (ADR)	: TP1, TP29
Tank code (ADR)	: LGBV
Vehicle for tank carriage	: AT
Transport category (ADR)	: 3
Special provisions for carriage - Packages (ADR)	: V12
Special provisions for carriage - Loading, unloading and handling (ADR)	: CV13
Hazard identification number (Kemler No.)	: 90
Orange plates	:



Tunnel restriction code (ADR)	: -
EAC code	: •3Z

Transport by sea

Special provisions (IMDG)	: 274, 335, 969
Limited quantities (IMDG)	: 5 L
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: LP01, P001
Special packing provisions (IMDG)	: PP1
IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T4
Tank special provisions (IMDG)	: TP2, TP29
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-F
Stowage category (IMDG)	: A

Air transport

PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y964
PCA limited quantity max net quantity (IATA)	: 30kgG
PCA packing instructions (IATA)	: 964
PCA max net quantity (IATA)	: 450L
CAO packing instructions (IATA)	: 964
CAO max net quantity (IATA)	: 450L
Special provisions (IATA)	: A97, A158, A197
ERG code (IATA)	: 9L

Inland waterway transport

Classification code (ADN)	: M6
Special provisions (ADN)	: 274, 335, 375, 601
Limited quantities (ADN)	: 5 L
Excepted quantities (ADN)	: E1

Carriage permitted (ADN) : T
Equipment required (ADN) : PP
Number of blue cones/lights (ADN) : 0

Rail transport

Classification code (RID) : M6
Special provisions (RID) : 274, 335, 375, 601
Limited quantities (RID) : 5L
Excepted quantities (RID) : E1
Packing instructions (RID) : P001, IBC03, LP01, R001
Special packing provisions (RID) : PP1
Mixed packing provisions (RID) : MP19
Portable tank and bulk container instructions (RID) : T4
Portable tank and bulk container special provisions (RID) : TP1, TP29
Tank codes for RID tanks (RID) : LGBV
Transport category (RID) : 3
Special provisions for carriage – Packages (RID) : W12
Special provisions for carriage - Loading, unloading and handling (RID) : CW13, CW31
Colis express (express parcels) (RID) : CE8
Hazard identification number (RID) : 90

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

EU restriction list (REACH Annex XVII)

Reference code	Applicable on
3(a)	Orange Oil ; Eucalyptus oil ; acetyl propionyl
3(b)	MERLIN'S BEARD FO-0135 ; Iso E Super ; Benzyl benzoate ; Eugenol ; Vertenex ; Amyl cinnamic aldehyde ; Cinnamic aldehyde ; Hexyl salicylate ; 2-Isobutyl-4-methyltetrahydro-2H-pyran-4-ol ; GAMMA-OCTALACTONE ; Orange Oil ; Dihydromyrcenol ; Patchouli oil ; 2-Methyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol ; Cedarwood oil, Texas ; Eucalyptus oil ; Linalool ; Aldehyde C-16 ; acetyl propionyl
3(c)	MERLIN'S BEARD FO-0135 ; Iso E Super ; Benzyl benzoate ; Amyl cinnamic aldehyde ; Cinnamic aldehyde ; Hexamethylindanopyran ; Hexyl salicylate ; Orange Oil ; Aldehyde C-14 ; Patchouli oil ; 2-Methyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol ; Cedarwood oil, Texas ; Eucalyptus oil ; Aldehyde C-16
40.	Orange Oil ; Eucalyptus oil ; acetyl propionyl

Contains no substance(s) listed on the REACH Candidate List

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Contains substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

Name	CN designation	CAS-No.	CN code	Category	Threshold	Annex
Piperonal		120-57-0	2932 93 00	Category 1		Annex I

15.1.2. National regulations

Germany

Water hazard class (WGK) : WGK 2, Significantly hazardous to water (Classification according to AwSV, Annex 1)
Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)
List of sensitizing substances (TRGS 907) : Contains sensitizing substances according TRGS 907

Netherlands

SZW-lijst van kankerverwekkende stoffen : Orange Oil, Cedarwood oil, Texas, Eucalyptus oil are listed
SZW-lijst van mutagene stoffen : Orange Oil, Eucalyptus oil are listed
SZW-lijst van reprotoxische stoffen – Borstvoeding : None of the components are listed
SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : None of the components are listed
SZW-lijst van reprotoxische stoffen – Ontwikkeling : None of the components are listed

Denmark

Classification remarks : Emergency management guidelines for the storage of flammable liquids must be followed
Danish National Regulations : Young people below the age of 18 years are not allowed to use the product
Pregnant/breastfeeding women working with the product must not be in direct contact with the product

Switzerland

Storage class (LK) : LK 10/12 - Liquids

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BLV	Biological limit value
CAS-No.	Chemical Abstract Service number
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
EC-No.	European Community number
EN	European Standard
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic

Abbreviations and acronyms:

PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative
WGK	Water Hazard Class

Full text of H- and EUH-statements:

Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure.
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.

Full text of H- and EUH-statements:	
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1B	Skin sensitisation, category 1B
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.