Safety Data Sheet

acc. to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU

Perfume Oil Waterworld

Version number: V 2.0
Replaces version of: 31.05.2019 (V 1)

Revision: 31.07.2024

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

1.1 Product identifier

Trade name	**Perfume Oil Waterworld**
Registration number (REACH)	not relevant (mixture)
Unique formula identifier	03TD-2023-R00U-7018
Article number	V/11040/3

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

Relevant identified uses	Professional use
Uses advised against	The product is not intended for consumer use.

1.3 Details of the supplier of the safety data sheet

Dragonspice Naturwaren
Im Staudfuß 4
72770 Reutlingen
Email: info@dragonspice.de
Telefon:07121-5939980
Umsatzsteuer-ID: DE245842852

1.4 Emergency telephone number

Vergiftungs-Informations-Zentrale
Freiburg +0049(0)761 19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification acc. to GHS

Section	Hazard class	Hazard class and category	Hazard statement
3.3	serious eye damage/eye irritation	Eye Irrit. 2	H319
3.4S	skin sensitisation	Skin Sens. 1	H317
4.1C	hazardous to the aquatic environment - chronic hazard	Aquatic Chronic 3	H412

For full text of abbreviations: see SECTION 16.

2.2 Label elements

Labelling

- Signal word warning
- Pictograms

GHS07

- Hazard statements

H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H412	Harmful to aquatic life with long lasting effects.

- Precautionary statements

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/….
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

- Hazardous ingredients for labelling: d-Limonene, Menthanylacetate, 3-methyl-5-phenylpent-2-enenitrile, HEXYL CINNAMIC ALDEHYDE, Citronellol, Linalool, Hivertal (Ligustral), Geraniol, Aldehyde C 12 MNA, Methyl cyclomyrceton, Methyl 2,4-dihydroxy-3,6-dimethylbenzoate

2.3 Other hazards

This material is combustible, but will not ignite readily.

Results of PBT and vPvB assessment

Does not contain a PBT-/vPvB-substance at a concentration of ≥0,1%.

Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of ≥0,1%.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not relevant (mixture)

3.2 Mixtures

Description of the mixture

Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms
d-Limonene	CAS No 5989-27-5 68606-81-5	3 – < 5	Flam. Liq. 3 / H226 Skin Irrit. 2 / H315 Skin Sens. 1 / H317 Asp. Tox. 1 / H304 Aquatic Acute 1 / H400 Aquatic Chronic 3 / H412	
2,6-dimethyloct-7-en-2-ol	CAS No 18479-58-8	3 – < 5	Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 STOT SE 3 / H336	
Menthyl acetate laevo	CAS No 2623-23-6 16409-45-3	1 – < 3	Aquatic Chronic 2 / H411	
Menthanylacetate	CAS No 58985-18-5	1 – < 3	Eye Irrit. 2 / H319 Skin Sens. 1B / H317 Aquatic Chronic 2 / H411	

Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms
HEXYL CINNAMIC ALDE-HYDE	CAS No 101-86-0	1 – < 3	Skin Sens. 1 / H317 Aquatic Acute 1 / H400 Aquatic Chronic 2 / H411	
2-phenylethanol	CAS No 60-12-8	1 – < 3	Acute Tox. 4 / H302 Acute Tox. 4 / H332 Eye Irrit. 2 / H319	
Terpineol	CAS No 8000-41-7	1 – < 3	Skin Irrit. 2 / H315 Eye Irrit. 2 / H319	
Phenethyl acetate	CAS No 103-45-7	1 – < 3	Eye Dam. 1 / H318	
Hexyl Acetate	CAS No 142-92-7	1 – < 3	Flam. Liq. 3 / H226	
OTBCH Acetate	CAS No 20298-69-5	1 – < 3	Aquatic Chronic 2 / H411	
Citronellol	CAS No 106-22-9	< 1	Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 Skin Sens. 1B / H317	
Methyl cyclomyrceton	CAS No 54464-57-2	< 1	Skin Irrit. 2 / H315 Skin Sens. 1B / H317 Aquatic Chronic 2 / H411	
Linalool	CAS No 78-70-6	< 1	Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 Skin Sens. 1B / H317	
Aldehyde C 12 MNA	CAS No 110-41-8	< 1	Skin Irrit. 2 / H315 Skin Sens. 1B / H317 Aquatic Acute 1 / H400 Aquatic Chronic 1 / H410	
Hivertal (Ligustral)	CAS No 68039-49-6	< 1	Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 Skin Sens. 1 / H317 Aquatic Chronic 2 / H411	
Geraniol	CAS No 106-24-1	< 1	Skin Irrit. 2 / H315 Eye Dam. 1 / H318 Skin Sens. 1 / H317	
3-methyl-5-phenylpent-2-enenitrile	CAS No 93893-89-1 53243-60-0	< 1	Acute Tox. 4 / H302 Skin Sens. 1A / H317 Aquatic Chronic 3 / H412	
Benzyl benzoate	CAS No 120-51-4	< 1	Acute Tox. 4 / H302 Aquatic Acute 1 / H400 Aquatic Chronic 2 / H411	
Methyl 2,4-dihydroxy-3,6-dimethylbenzoate	CAS No 4707-47-5	< 1	Skin Sens. 1B / H317	
3-methyl-5-phenylpent-2-enenitrile	CAS No 53243-59-7	< 1	Acute Tox. 4 / H302 Skin Sens. 1A / H317 Aquatic Chronic 3 /	

Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms
			H412	

Name of substance	Specific Conc. Limits	M-Factors	ATE	Exposure route
2-phenylethanol	-	-	1,603 $^{mg}/_{kg}$ 11 $^{mg}/_{l}$/4h >4.63 $^{mg}/_{l}$/4h	oral inhalation: vapour inhalation: dust/mist
3-methyl-5-phenylpent-2-enenitrile	-	-	>300 $^{mg}/_{kg}$	oral
Benzyl benzoate	-	-	500 $^{mg}/_{kg}$	oral
3-methyl-5-phenylpent-2-enenitrile	-	-	>300 $^{mg}/_{kg}$	oral

Remarks

For full text of abbreviations: see SECTION 16

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. Provide fresh air.

Following skin contact

Wash with plenty of soap and water.

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects are not known to date.

4.3 Indication of any immediate medical attention and special treatment needed

none

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water spray, BC-powder, Carbon dioxide (CO2)

Unsuitable extinguishing media

Water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO2)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. If substance has entered a water course or sewer, inform the responsible authority.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains

Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

- Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Use only in well-ventilated areas.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

There is no additional information.
Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials" (Section 10).

7.3 Specific end use(s)

See section 16 for a general overview.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values (Workplace Exposure Limits)
this information is not available

Relevant DNELs of components

Name of substance	CAS No	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
d-Limonene	5989-27-5 68606-81-5	DNEL	66.7 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
d-Limonene	5989-27-5 68606-81-5	DNEL	9.5 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
2,6-dimethyloct-7-en-2-ol	18479-58-8	DNEL	24.7 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
2,6-dimethyloct-7-en-2-ol	18479-58-8	DNEL	7 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
Menthyl acetate laevo	2623-23-6 16409-45-3	DNEL	33.6 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
Menthyl acetate laevo	2623-23-6 16409-45-3	DNEL	9.5 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
Menthanylacetate	58985-18-5	DNEL	3.51 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
Menthanylacetate	58985-18-5	DNEL	1 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
Menthanylacetate	58985-18-5	DNEL	233.3 µg/cm²	human, dermal	worker (industry)	chronic - local effects
HEXYL CINNAMIC ALDEHYDE	101-86-0	DNEL	0.078 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
HEXYL CINNAMIC ALDEHYDE	101-86-0	DNEL	6.28 mg/m³	human, inhalatory	worker (industry)	acute - local effects
HEXYL CINNAMIC ALDEHYDE	101-86-0	DNEL	18.2 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
HEXYL CINNAMIC ALDEHYDE	101-86-0	DNEL	525 µg/cm²	human, dermal	worker (industry)	chronic - local effects
HEXYL CINNAMIC ALDEHYDE	101-86-0	DNEL	525 µg/cm²	human, dermal	worker (industry)	acute - local effects
2-phenylethanol	60-12-8	DNEL	59.9 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
2-phenylethanol	60-12-8	DNEL	21.2 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
Hexyl Acetate	142-92-7	DNEL	48 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
Hexyl Acetate	142-92-7	DNEL	48 mg/m³	human, inhalatory	worker (industry)	chronic - local effects
Hexyl Acetate	142-92-7	DNEL	14 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
Citronellol	106-22-9	DNEL	161.6 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
Citronellol	106-22-9	DNEL	10 mg/m³	human, inhalatory	worker (industry)	chronic - local effects
Citronellol	106-22-9	DNEL	10 mg/m³	human, inhalatory	worker (industry)	acute - local effects
Citronellol	106-22-9	DNEL	327.4 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects

Relevant DNELs of components

Name of substance	CAS No	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
Citronellol	106-22-9	DNEL	2,950 µg/cm²	human, dermal	worker (industry)	acute - local effects
Methyl cyclomyrceton	54464-57-2	DNEL	30 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
Methyl cyclomyrceton	54464-57-2	DNEL	28.7 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
Methyl cyclomyrceton	54464-57-2	DNEL	648 µg/cm²	human, dermal	worker (industry)	chronic - local effects
Linalool	78-70-6	DNEL	2.8 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
Linalool	78-70-6	DNEL	16.5 mg/m³	human, inhalatory	worker (industry)	acute - systemic effects
Linalool	78-70-6	DNEL	2.5 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
Linalool	78-70-6	DNEL	5 mg/kg bw/day	human, dermal	worker (industry)	acute - systemic effects
Aldehyde C 12 MNA	110-41-8	DNEL	36.89 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
Aldehyde C 12 MNA	110-41-8	DNEL	352.6 mg/m³	human, inhalatory	worker (industry)	acute - systemic effects
Aldehyde C 12 MNA	110-41-8	DNEL	92.21 mg/m³	human, inhalatory	worker (industry)	chronic - local effects
Aldehyde C 12 MNA	110-41-8	DNEL	881.6 mg/m³	human, inhalatory	worker (industry)	acute - local effects
Aldehyde C 12 MNA	110-41-8	DNEL	10.46 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
Aldehyde C 12 MNA	110-41-8	DNEL	100 mg/kg bw/day	human, dermal	worker (industry)	acute - systemic effects
Geraniol	106-24-1	DNEL	161.6 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
Geraniol	106-24-1	DNEL	12.5 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
Geraniol	106-24-1	DNEL	11,800 µg/cm²	human, dermal	worker (industry)	chronic - local effects
3-methyl-5-phenylpent-2-enenitrile	93893-89-1 53243-60-0	DNEL	0.588 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
3-methyl-5-phenylpent-2-enenitrile	93893-89-1 53243-60-0	DNEL	1.667 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
Benzyl benzoate	120-51-4	DNEL	5.1 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
Benzyl benzoate	120-51-4	DNEL	102 mg/m³	human, inhalatory	worker (industry)	acute - systemic effects
Benzyl benzoate	120-51-4	DNEL	2.6 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects

Relevant DNELs of components

Name of substance	CAS No	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
Methyl 2,4-dihydroxy-3,6-dimethylbenzoate	4707-47-5	DNEL	2,500 µg/cm²	human, dermal	worker (industry)	chronic - local effects
3-methyl-5-phenylpent-2-enenitrile	53243-59-7	DNEL	0.588 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
3-methyl-5-phenylpent-2-enenitrile	53243-59-7	DNEL	1.667 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects

Relevant PNECs of components

Name of substance	CAS No	End-point	Threshold level	Organism	Environmental compartment	Exposure time
d-Limonene	5989-27-5 68606-81-5	PNEC	14 µg/l	aquatic organisms	freshwater	short-term (single instance)
d-Limonene	5989-27-5 68606-81-5	PNEC	1.4 µg/l	aquatic organisms	marine water	short-term (single instance)
d-Limonene	5989-27-5 68606-81-5	PNEC	1.8 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
d-Limonene	5989-27-5 68606-81-5	PNEC	3.85 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
d-Limonene	5989-27-5 68606-81-5	PNEC	0.385 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
d-Limonene	5989-27-5 68606-81-5	PNEC	0.763 mg/kg	terrestrial organisms	soil	short-term (single instance)
2,6-dimethyloct-7-en-2-ol	18479-58-8	PNEC	27.8 µg/l	aquatic organisms	freshwater	short-term (single instance)
2,6-dimethyloct-7-en-2-ol	18479-58-8	PNEC	2.78 µg/l	aquatic organisms	marine water	short-term (single instance)
2,6-dimethyloct-7-en-2-ol	18479-58-8	PNEC	10 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
2,6-dimethyloct-7-en-2-ol	18479-58-8	PNEC	0.594 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
2,6-dimethyloct-7-en-2-ol	18479-58-8	PNEC	0.059 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
2,6-dimethyloct-7-en-2-ol	18479-58-8	PNEC	0.103 mg/kg	terrestrial organisms	soil	short-term (single instance)
Menthyl acetate laevo	2623-23-6 16409-45-3	PNEC	0.003 mg/l	aquatic organisms	freshwater	short-term (single instance)
Menthyl acetate laevo	2623-23-6 16409-45-3	PNEC	0 mg/l	aquatic organisms	marine water	short-term (single instance)
Menthyl acetate laevo	2623-23-6 16409-45-3	PNEC	0.26 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Menthyl acetate laevo	2623-23-6 16409-45-3	PNEC	0.338 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
Menthyl acetate laevo	2623-23-6 16409-45-3	PNEC	0.034 mg/kg	aquatic organisms	marine sediment	short-term (single instance)

Relevant PNECs of components

Name of substance	CAS No	End-point	Threshold level	Organism	Environmental compartment	Exposure time
Menthyl acetate laevo	2623-23-6 16409-45-3	PNEC	0.066 mg/kg	terrestrial organisms	soil	short-term (single instance)
Menthanylacetate	58985-18-5	PNEC	2.27 µg/l	aquatic organisms	freshwater	short-term (single instance)
Menthanylacetate	58985-18-5	PNEC	0.227 µg/l	aquatic organisms	marine water	short-term (single instance)
Menthanylacetate	58985-18-5	PNEC	1.7 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Menthanylacetate	58985-18-5	PNEC	0.254 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
Menthanylacetate	58985-18-5	PNEC	25.4 µg/kg	aquatic organisms	marine sediment	short-term (single instance)
Menthanylacetate	58985-18-5	PNEC	49.4 µg/kg	terrestrial organisms	soil	short-term (single instance)
HEXYL CINNAMIC ALDEHYDE	101-86-0	PNEC	0.001 mg/l	aquatic organisms	freshwater	short-term (single instance)
HEXYL CINNAMIC ALDEHYDE	101-86-0	PNEC	0 mg/l	aquatic organisms	marine water	short-term (single instance)
HEXYL CINNAMIC ALDEHYDE	101-86-0	PNEC	10 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
HEXYL CINNAMIC ALDEHYDE	101-86-0	PNEC	3.2 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
HEXYL CINNAMIC ALDEHYDE	101-86-0	PNEC	0.064 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
HEXYL CINNAMIC ALDEHYDE	101-86-0	PNEC	0.398 mg/kg	terrestrial organisms	soil	short-term (single instance)
2-phenylethanol	60-12-8	PNEC	0.215 mg/l	aquatic organisms	freshwater	short-term (single instance)
2-phenylethanol	60-12-8	PNEC	0.021 mg/l	aquatic organisms	marine water	short-term (single instance)
2-phenylethanol	60-12-8	PNEC	10 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
2-phenylethanol	60-12-8	PNEC	1.454 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
2-phenylethanol	60-12-8	PNEC	0.145 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
2-phenylethanol	60-12-8	PNEC	0.164 mg/kg	terrestrial organisms	soil	short-term (single instance)
Phenethyl acetate	103-45-7	PNEC	0.011 mg/l	aquatic organisms	freshwater	short-term (single instance)
Phenethyl acetate	103-45-7	PNEC	0.001 mg/l	aquatic organisms	marine water	short-term (single instance)
Phenethyl acetate	103-45-7	PNEC	10 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Phenethyl acetate	103-45-7	PNEC	0.128 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
Phenethyl acetate	103-45-7	PNEC	0.013 mg/kg	aquatic organisms	marine sediment	short-term (single instance)

Relevant PNECs of components

Name of substance	CAS No	End-point	Threshold level	Organism	Environmental compartment	Exposure time
Phenethyl acetate	103-45-7	PNEC	0.019 mg/kg	terrestrial organisms	soil	short-term (single instance)
Hexyl Acetate	142-92-7	PNEC	0.004 mg/l	aquatic organisms	freshwater	short-term (single instance)
Hexyl Acetate	142-92-7	PNEC	0 mg/l	aquatic organisms	marine water	short-term (single instance)
Hexyl Acetate	142-92-7	PNEC	1 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Hexyl Acetate	142-92-7	PNEC	0.144 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
Hexyl Acetate	142-92-7	PNEC	0.014 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
Hexyl Acetate	142-92-7	PNEC	0.026 mg/kg	terrestrial organisms	soil	short-term (single instance)
OTBCH Acetate	20298-69-5	PNEC	0.057 mg/l	aquatic organisms	freshwater	short-term (single instance)
OTBCH Acetate	20298-69-5	PNEC	0.006 mg/l	aquatic organisms	marine water	short-term (single instance)
OTBCH Acetate	20298-69-5	PNEC	10 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
OTBCH Acetate	20298-69-5	PNEC	7.62 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
OTBCH Acetate	20298-69-5	PNEC	0.762 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
OTBCH Acetate	20298-69-5	PNEC	4.4 mg/kg	terrestrial organisms	soil	short-term (single instance)
Citronellol	106-22-9	PNEC	0.002 mg/l	aquatic organisms	freshwater	short-term (single instance)
Citronellol	106-22-9	PNEC	0 mg/l	aquatic organisms	marine water	short-term (single instance)
Citronellol	106-22-9	PNEC	580 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Citronellol	106-22-9	PNEC	0.026 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
Citronellol	106-22-9	PNEC	0.003 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
Citronellol	106-22-9	PNEC	0.004 mg/kg	terrestrial organisms	soil	short-term (single instance)
Methyl cyclomyrceton	54464-57-2	PNEC	4.4 µg/l	aquatic organisms	freshwater	short-term (single instance)
Methyl cyclomyrceton	54464-57-2	PNEC	0.44 µg/l	aquatic organisms	marine water	short-term (single instance)
Methyl cyclomyrceton	54464-57-2	PNEC	10 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Methyl cyclomyrceton	54464-57-2	PNEC	3.73 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
Methyl cyclomyrceton	54464-57-2	PNEC	0.75 mg/kg	aquatic organisms	marine sediment	short-term (single instance)

Relevant PNECs of components

Name of substance	CAS No	End-point	Threshold level	Organism	Environmental compartment	Exposure time
Methyl cyclomyrceton	54464-57-2	PNEC	2.7 mg/kg	terrestrial organisms	soil	short-term (single instance)
Linalool	78-70-6	PNEC	0.2 mg/l	aquatic organisms	freshwater	short-term (single instance)
Linalool	78-70-6	PNEC	0.02 mg/l	aquatic organisms	marine water	short-term (single instance)
Linalool	78-70-6	PNEC	10 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Linalool	78-70-6	PNEC	2.22 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
Linalool	78-70-6	PNEC	0.222 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
Linalool	78-70-6	PNEC	0.327 mg/kg	terrestrial organisms	soil	short-term (single instance)
Aldehyde C 12 MNA	110-41-8	PNEC	0.66 µg/l	aquatic organisms	freshwater	short-term (single instance)
Aldehyde C 12 MNA	110-41-8	PNEC	10 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Aldehyde C 12 MNA	110-41-8	PNEC	0.265 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
Aldehyde C 12 MNA	110-41-8	PNEC	26.5 µg/kg	aquatic organisms	marine sediment	short-term (single instance)
Aldehyde C 12 MNA	110-41-8	PNEC	52.6 µg/kg	terrestrial organisms	soil	short-term (single instance)
Geraniol	106-24-1	PNEC	0.011 mg/l	aquatic organisms	freshwater	short-term (single instance)
Geraniol	106-24-1	PNEC	0.001 mg/l	aquatic organisms	marine water	short-term (single instance)
Geraniol	106-24-1	PNEC	0.7 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Geraniol	106-24-1	PNEC	0.115 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
Geraniol	106-24-1	PNEC	0.011 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
Geraniol	106-24-1	PNEC	0.017 mg/kg	terrestrial organisms	soil	short-term (single instance)
3-methyl-5-phenylpent-2-enenitrile	93893-89-1 53243-60-0	PNEC	0.005 mg/l	aquatic organisms	freshwater	short-term (single instance)
3-methyl-5-phenylpent-2-enenitrile	93893-89-1 53243-60-0	PNEC	0.001 mg/l	aquatic organisms	marine water	short-term (single instance)
3-methyl-5-phenylpent-2-enenitrile	93893-89-1 53243-60-0	PNEC	0.26 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
3-methyl-5-phenylpent-2-enenitrile	93893-89-1 53243-60-0	PNEC	0.2 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
3-methyl-5-phenylpent-2-en-	93893-89-1 53243-60-0	PNEC	0.02 mg/kg	aquatic organisms	marine sediment	short-term (single instance)

Relevant PNECs of components

Name of substance	CAS No	End-point	Threshold level	Organism	Environmental compartment	Exposure time
enitrile						
3-methyl-5-phenylpent-2-enenitrile	93893-89-1 53243-60-0	PNEC	0.035 mg/kg	terrestrial organisms	soil	short-term (single instance)
Benzyl benzoate	120-51-4	PNEC	0.017 mg/l	aquatic organisms	freshwater	short-term (single instance)
Benzyl benzoate	120-51-4	PNEC	0.002 mg/l	aquatic organisms	marine water	short-term (single instance)
Benzyl benzoate	120-51-4	PNEC	100 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Benzyl benzoate	120-51-4	PNEC	10.66 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
Benzyl benzoate	120-51-4	PNEC	1.07 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
Benzyl benzoate	120-51-4	PNEC	2.12 mg/kg	terrestrial organisms	soil	short-term (single instance)
Methyl 2,4-dihydroxy-3,6-dimethylbenzoate	4707-47-5	PNEC	3.3 µg/l	aquatic organisms	freshwater	short-term (single instance)
Methyl 2,4-dihydroxy-3,6-dimethylbenzoate	4707-47-5	PNEC	0.33 µg/l	aquatic organisms	marine water	short-term (single instance)
Methyl 2,4-dihydroxy-3,6-dimethylbenzoate	4707-47-5	PNEC	10 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Methyl 2,4-dihydroxy-3,6-dimethylbenzoate	4707-47-5	PNEC	89 µg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
Methyl 2,4-dihydroxy-3,6-dimethylbenzoate	4707-47-5	PNEC	8.9 µg/kg	aquatic organisms	marine sediment	short-term (single instance)
Methyl 2,4-dihydroxy-3,6-dimethylbenzoate	4707-47-5	PNEC	16 µg/kg	terrestrial organisms	soil	short-term (single instance)
3-methyl-5-phenylpent-2-enenitrile	53243-59-7	PNEC	0.005 mg/l	aquatic organisms	freshwater	short-term (single instance)
3-methyl-5-phenylpent-2-enenitrile	53243-59-7	PNEC	0.001 mg/l	aquatic organisms	marine water	short-term (single instance)
3-methyl-5-phenylpent-2-enenitrile	53243-59-7	PNEC	0.26 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
3-methyl-5-phenylpent-2-enenitrile	53243-59-7	PNEC	0.2 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
3-methyl-5-phenylpent-2-enenitrile	53243-59-7	PNEC	0.02 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
3-methyl-5-phenylpent-2-enenitrile	53243-59-7	PNEC	0.035 mg/kg	terrestrial organisms	soil	short-term (single instance)

8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.

Skin protection

- Hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- Type of material

NBR: acrylonitrile-butadiene rubber

- Material thickness

> 0.7 mm

- Breakthrough times of the glove material

>10 minutes (permeation: level 1)

- Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.
Filtering half mask (EN 149). Type: A (against organic gases and vapours with a boiling point of > 65 °C , colour code: Brown).

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	liquid (liquid)
Colour	light yellow
Odour	characteristic
Melting point/freezing point	not determined
Boiling point or initial boiling point and boiling range	not determined
Flammability	this material is combustible, but will not ignite readily
Lower and upper explosion limit	not determined
Flash point	>70 °C
Auto-ignition temperature	not determined
Decomposition temperature	not relevant
pH (value)	not determined

Kinematic viscosity	not determined
Solubility(ies)	not determined

Partition coefficient

Partition coefficient n-octanol/water (log value)	this information is not available

Vapour pressure	not determined

Density and/or relative density

Density	0.982 $^{g}/_{cm^3}$
Relative vapour density	information on this property is not available

Particle characteristics	not relevant (liquid)

9.2 Other information

Information with regard to physical hazard classes: hazard classes acc. to GHS (physical hazards): not relevant

Flammable liquids

- Sustained combustibility	yes (sustained combustion was observed)
Other safety characteristics	there is no additional information

SECTION 10: Stability and reactivity

10.1 Reactivity
Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

10.2 Chemical stability
See below "Conditions to avoid".

10.3 Possibility of hazardous reactions
No known hazardous reactions.

10.4 Conditions to avoid
There are no specific conditions known which have to be avoided.

10.5 Incompatible materials
Oxidisers

10.6 Hazardous decomposition products
Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects
Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification acc. to GHS

Acute toxicity

The classification criteria for these hazard classes are not met.

Acute toxicity estimate (ATE) of components

Name of substance	CAS No	Exposure route	ATE
2-phenylethanol	60-12-8	oral	1,603 $^{mg}/_{kg}$
2-phenylethanol	60-12-8	inhalation: vapour	11 $^{mg}/_{l}$/4h
2-phenylethanol	60-12-8	inhalation: dust/mist	>4.63 $^{mg}/_{l}$/4h
3-methyl-5-phenylpent-2-enenitrile	93893-89-1 53243-60-0	oral	>300 $^{mg}/_{kg}$
Benzyl benzoate	120-51-4	oral	500 $^{mg}/_{kg}$
3-methyl-5-phenylpent-2-enenitrile	53243-59-7	oral	>300 $^{mg}/_{kg}$

Skin corrosion/irritation

The classification criteria for this hazard class are not met.

Serious eye damage/eye irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

May cause an allergic skin reaction.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

11.2 Information on other hazards

There is no additional information.

SECTION 12: Ecological information

12.1 Toxicity

Harmful to aquatic life with long lasting effects.

12.2 Persistence and degradability

Degradability of components

Name of substance	CAS No	Process	Degradation rate	Time	Method	Source
d-Limonene	5989-27-5 68606-81-5	carbon dioxide generation	58.8 %	14 d		ECHA
d-Limonene	5989-27-5 68606-81-5	oxygen depletion	80 %	28 d		ECHA
2,6-dimethyl-oct-7-en-2-ol	18479-58-8	carbon dioxide generation	72 %	28 d		ECHA
2,6-dimethyl-oct-7-en-2-ol	18479-58-8	DOC removal	100 %	28 d		ECHA
Menthyl acetate laevo	2623-23-6 16409-45-3	oxygen depletion	48 %	28 d		ECHA
Menthanylacetate	58985-18-5	oxygen depletion	85 %	28 d		ECHA
HEXYL CINNAMIC ALDEHYDE	101-86-0	oxygen depletion	97 %	28 d		ECHA
Phenethyl acetate	103-45-7	oxygen depletion	72 %	28 d		ECHA
Hexyl Acetate	142-92-7	oxygen depletion	66 %	28 d		ECHA
OTBCH Acetate	20298-69-5	oxygen depletion	43 %	28 d		ECHA
Methyl cyclomyrceton	54464-57-2	oxygen depletion	96.3 %	28 d		ECHA
Linalool	78-70-6	oxygen depletion	40.9 %	5 d		ECHA
Aldehyde C 12 MNA	110-41-8	oxygen depletion	11 %	2 d		ECHA
3-methyl-5-phenylpent-2-enenitrile	93893-89-1 53243-60-0	oxygen depletion	38 %	28 d		ECHA
Methyl 2,4-dihydroxy-3,6-dimethylbenzoate	4707-47-5	oxygen depletion	16 %	2 d		ECHA
3-methyl-5-phenylpent-2-enenitrile	53243-59-7	oxygen depletion	38 %	28 d		ECHA

12.3 Bioaccumulative potential

Data are not available.

Bioaccumulative potential of components

Name of substance	CAS No	BCF	Log KOW	BOD5/COD
d-Limonene	5989-27-5 68606-81-5		4.38 (pH value: 7.2, 37 °C)	
2,6-dimethyloct-7-en-2-ol	18479-58-8	64.8	3.25 (pH value: 7, 40 °C)	
Menthyl acetate laevo	2623-23-6 16409-45-3		4.39 (pH value: 5.76, 25 °C)	
HEXYL CINNAMIC ALDEHYDE	101-86-0		5.3 (24 °C)	

Bioaccumulative potential of components

Name of substance	CAS No	BCF	Log KOW	BOD5/COD
2-phenylethanol	60-12-8		0.8 (pH value: 7, 20 °C)	
Phenethyl acetate	103-45-7		2.4 (25 °C)	
Hexyl Acetate	142-92-7		3.3 (30 °C)	
OTBCH Acetate	20298-69-5	156	4.7 (pH value: ~7, 25 °C)	
Citronellol	106-22-9	82.59	3.41 (25 °C)	
Methyl cyclomyrceton	54464-57-2	391	5.6 (30 °C)	
Linalool	78-70-6		2.9 (pH value: 7, 20 °C)	
Aldehyde C 12 MNA	110-41-8		4.9 (35 °C)	
Geraniol	106-24-1		2.6 (25 °C)	
3-methyl-5-phenylpent-2-enenitrile	93893-89-1 53243-60-0		2.81 (pH value: 7, 23.6 °C)	
Benzyl benzoate	120-51-4	193.4	3.97 (25 °C)	
Methyl 2,4-dihydroxy-3,6-dimethylbenzoate	4707-47-5		2.6 (20 °C)	
3-methyl-5-phenylpent-2-enenitrile	53243-59-7		2.81 (pH value: 7, 23.6 °C)	

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB. Does not contain a PBT-/vPvB-substance at a concentration of ≥0,1%.

12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of ≥0,1%.

12.7 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packagings

Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

14.1 UN number or ID number	not subject to transport regulations
14.2 UN proper shipping name	not relevant
14.3 Transport hazard class(es)	none

14.4 Packing group
not assigned

14.5 Environmental hazards
non-environmentally hazardous acc. to the dangerous goods regulations

14.6 Special precautions for user
There is no additional information.

14.7 Maritime transport in bulk according to IMO instruments
The cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations

Transport information - National regulations - Additional information (UN RTDG)
Not subject to transport regulations: UN RTDG

International Maritime Dangerous Goods Code (IMDG) - Additional information
Not subject to IMDG.

International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information
Not subject to ICAO-IATA.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
There is no additional information.

15.2 Chemical safety assessment
Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
Acute Tox.	Acute toxicity
Aquatic Acute	Hazardous to the aquatic environment - acute hazard
Aquatic Chronic	Hazardous to the aquatic environment - chronic hazard
Asp. Tox.	Aspiration hazard
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BOD	Biochemical Oxygen Demand
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
COD	Chemical oxygen demand
DGR	Dangerous Goods Regulations (see IATA/DGR)
DNEL	Derived No-Effect Level
ED	Endocrine disruptor
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
Flam. Liq.	Flammable liquid
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations

Abbr.	Descriptions of used abbreviations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
log KOW	n-Octanol/water
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
Skin Sens.	Skin sensitisation
STOT SE	Specific target organ toxicity - single exposure
UN RTDG	UN Recommendations on the Transport of Dangerous Good
vPvB	Very Persistent and very Bioaccumulative

Key literature references and sources for data

UN Recommendations on the Transport of Dangerous Good. International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Classification procedure

Physical and chemical properties: The classification is based on tested mixture.
Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text
H226	Flammable liquid and vapour.
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.
H332	Harmful if inhaled.
H336	May cause drowsiness or dizziness.
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.

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.