



PEPPERMINT ORGANIC OIL

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 1/31/2020 Revision date: 4/7/2026 Supersedes version of: 6/19/2020 Version: 1.2

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

1.1. Product identifier

Product form : Mixture
Product name : PEPPERMINT ORGANIC OIL
Product code : 50-6225-24
Product group : Trade product

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

1.2.1. Relevant identified uses

No additional information available

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

The Lebermuth Company
4004 Technology Drive
46628 South Bend, IN
United States
T 574-259-7000, F 574-258-7450
info@lebermuth.com, www.lebermuth.com

1.4. Emergency telephone number

Emergency number : CHEMTREC - USA: 800-424-9300 International: +1 703-527-3887 / 1-800-424-9300
CCN 13010

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
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

Causes skin irritation. May cause an allergic skin reaction. Toxic to aquatic life with long lasting effects.

2.2. Label elements

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

Hazard pictograms (CLP) :



GHS07

GHS09

Signal word (CLP) :

Warning

Contains :

alpha-pinene; beta-pinene; terpinen-4-ol; carvone; l-Limonene; alpha-terpinene; terpinolene; eucalyptol; isomenthone; l-Menthone; linalool; beta-caryophyllene

Hazard statements (CLP) :

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

Precautionary statements (CLP) :

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 - Wash hands, forearms and face thoroughly after handling.

PEPPERMINT ORGANIC OIL

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

P272 - Contaminated work clothing should not be allowed out of the workplace.
P273 - Avoid release to the environment.
P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P302+P352 - IF ON SKIN: Wash with plenty of water.
P321 - Specific treatment (see supplemental first aid instruction on this label).
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P391 - Collect spillage.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards

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

Component	
Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	ALPHA-PINENE (80-56-8), BETA-PINENE (127-91-3), CAMPHENE (79-92-5), L-LIMONENE (5989-54-8), P-CYMENE (99-87-6), EUCALYPTOL (470-82-6)
Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	ALPHA-PINENE (80-56-8), BETA-PINENE (127-91-3), CAMPHENE (79-92-5), L-LIMONENE (5989-54-8), P-CYMENE (99-87-6), EUCALYPTOL (470-82-6)

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

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]
MENTHOL	CAS-No.: 2216-51-5 EC-No.: 218-690-9	25 – 50	Skin Irrit. 2, H315
L-MENTHONE	CAS-No.: 14073-97-3 EC-No.: 237-926-1	10 – 25	Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Skin Sens. 1B, H317
MENTHYL ACETATE	CAS-No.: 16409-45-3 EC-No.: 240-459-6	1 – 5	Aquatic Chronic 2, H411
EUCALYPTOL	CAS-No.: 470-82-6 EC-No.: 207-431-5	1 – 5	Flam. Liq. 3, H226 Skin Sens. 1B, H317
BETA-CARYOPHYLLENE	CAS-No.: 87-44-5 EC-No.: 201-746-1	1 – 5	Skin Sens. 1B, H317 Asp. Tox. 1, H304
(+)-NEOMENTHOL	CAS-No.: 2216-52-6 EC-No.: 218-691-4	1 – 5	Skin Irrit. 2, H315 Eye Irrit. 2, H319
L-LIMONENE	CAS-No.: 5989-54-8 EC-No.: 227-815-6 EC Index-No.: 601-029-00-7	1 – 5	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

PEPPERMINT ORGANIC OIL

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
MENTHOFURAN	CAS-No.: 494-90-6 EC-No.: 207-795-5	1 – 5	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 2, H411
ISOMENTHONE	CAS-No.: 491-07-6 EC-No.: 207-727-4	1 – 5	Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Skin Sens. 1B, H317
PULEGONE	CAS-No.: 89-82-7 EC-No.: 201-943-2	1 – 5	Acute Tox. 4 (Oral), H302
BETA-PINENE substance with national workplace exposure limit(s) (BE, ES)	CAS-No.: 127-91-3 EC-No.: 204-872-5	1 – 5	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
ALPHA-PINENE substance with national workplace exposure limit(s) (BE, ES)	CAS-No.: 80-56-8 EC-No.: 201-291-9	1 – 5	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
CARVONE	CAS-No.: 99-49-0 EC-No.: 218-827-2 EC Index-No.: 606-148-00-8	0.1 – 1	Skin Sens. 1B, H317
4-TERPINEOL	CAS-No.: 562-74-3 EC-No.: 209-235-5	0.1 – 1	Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Skin Irrit. 2, H315 Skin Sens. 1, H317 STOT SE 3, H336
GAMMA-TERPINENE	CAS-No.: 99-85-4 EC-No.: 202-794-6	0.1 – 1	Flam. Liq. 3, H226 Repr. 2, H361 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
P-CYMENE	CAS-No.: 99-87-6 EC-No.: 202-796-7 EC Index-No.: 601-094-00-1	0.1 – 1	Flam. Liq. 3, H226 Acute Tox. 3 (Inhalation), H331 Acute Tox. 3 (Inhalation:vapour), H331 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
ALPHA-TERPINENE	CAS-No.: 99-86-5 EC-No.: 202-795-1	0.1 – 1	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Skin Sens. 1, H317 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
BETA-MYRCENE	CAS-No.: 123-35-3 EC-No.: 204-622-5	0.1 – 1	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 2, H411

PEPPERMINT ORGANIC OIL

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
LINALOOL	CAS-No.: 78-70-6 EC-No.: 201-134-4 EC Index-No.: 603-235-00-2	0.1 – 1	Eye Irrit. 2, H319 Skin Irrit. 2, H315 Skin Sens. 1B, H317
CAMPHENE	CAS-No.: 79-92-5 EC-No.: 201-234-8	0.1 – 1	Flam. Sol. 2, H228 Eye Irrit. 2, H319 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
3,7-DIMETHYLOCTA-1,3,6-TRIENE*	CAS-No.: 3338-55-4 EC-No.: 222-081-3	0.1 – 1	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 2, H411
TERPINOLENE	CAS-No.: 586-62-9 EC-No.: 209-578-0	0.1 – 1	Skin Sens. 1B, H317 Asp. Tox. 1, H304 Aquatic Chronic 1, H410 Aquatic Acute 1, H400

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 you feel unwell, seek medical advice.
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 eyes with water as a precaution.
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 inhalation	: No data available.
Symptoms/effects after skin contact	: Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: None under normal conditions.
Symptoms/effects after ingestion	: No data available.

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	: Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: No fire hazard.
Explosion hazard	: No direct explosion hazard.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

5.3. Advice for firefighters

Firefighting instructions	: Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
---------------------------	---

PEPPERMINT ORGANIC OIL

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.
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".
Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible.
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

Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.
Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment. Avoid breathing dust/fume/gas/mist/vapours/spray.
Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Keep in a cool, well-ventilated place away from heat.
Storage conditions : Keep cool. Protect from sunlight.
Packaging materials : Always store product in container of same material as original container.

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

PEPPERMINT ORGANIC OIL

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

ALPHA-PINENE (80-56-8)	
Belgium - Occupational Exposure Limits	
Local name	Essence de térébenthine et monoterpènes sélectionés # Terpentijn en geselecteerde monoterpene
OEL TWA	20 ppm
Regulatory reference	Koninklijk besluit/Arrêté royal 16/11/2023
Spain - Occupational Exposure Limits	
Local name	α -pineno (monoterpeno)
VLA-ED (OEL TWA)	113 mg/m ³ 20 ppm
Regulatory reference	Límites de Exposición Profesional para Agentes Químicos en España 2024. INSHT
BETA-PINENE (127-91-3)	
Belgium - Occupational Exposure Limits	
Local name	Essence de térébenthine et monoterpènes sélectionés # Terpentijn en geselecteerde monoterpene
OEL TWA	20 ppm
Regulatory reference	Koninklijk besluit/Arrêté royal 16/11/2023
Spain - Occupational Exposure Limits	
Local name	β -pineno (monoterpeno)
VLA-ED (OEL TWA)	113 mg/m ³ 20 ppm
Regulatory reference	Límites de Exposición Profesional para Agentes Químicos en España 2024. INSHT

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:

Wear recommended personal protective equipment.

Personal protective equipment symbol(s):



PEPPERMINT ORGANIC OIL

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

8.2.2.1. Eye and face protection

Eye protection:

Chemical goggles or 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	: Not available
Odour	: Not available
Odour threshold	: Not available
Melting point	: Not applicable
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Non flammable.
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: 62.8 °C
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: Not available
Viscosity, kinematic	: Not available
Solubility	: Insoluble.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: Not available
Relative density	: 0.9 (0.89 – 0.915)
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

Refractive index : 1.461 (1.45 – 1.47)

PEPPERMINT ORGANIC OIL

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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 hazard classes as defined in Regulation (EC) No 1272/2008

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

ALPHA-PINENE (80-56-8)	
LD50 oral rat	> 500 mg/kg bodyweight (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, Rat, Female, Experimental value, Oral, 01 day(s))
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Skin, 14 day(s))
BETA-PINENE (127-91-3)	
LD50 oral rat	4700 mg/kg (Rat, Oral)
CAMPHENE (79-92-5)	
LD50 oral	> 5000 mg/kg (Mouse, Male / female, Experimental value, Oral)
LD50 dermal rabbit	> 2000 mg/kg bodyweight (Rabbit, Read-across, Skin)
4-TERPINEOL (562-74-3)	
LD50 oral	1300 mg/kg
3,7-DIMETHYLOCTA-1,3,6-TRIENE* (3338-55-4)	
LD50 oral	5000 mg/kg bodyweight
CARVONE (99-49-0)	
LD50 oral	2500 mg/kg bodyweight
LD50 dermal	3800 mg/kg bodyweight
(+)-NEOMENTHOL (2216-52-6)	
LD50 oral	2500 mg/kg bodyweight
LC50 Inhalation - Rat (Dust/Mist)	5.3 mg/l/4h

PEPPERMINT ORGANIC OIL

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

MENTHOFURAN (494-90-6)	
LD50 oral	500 mg/kg bodyweight
BETA-MYRCENE (123-35-3)	
LD50 oral rat	> 11390 mg/kg bodyweight Animal: rat
LD50 oral	> 3380 mg/kg bodyweight Animal: mouse
LD50 dermal rabbit	> 5000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
P-CYMENE (99-87-6)	
LD50 oral rat	4750 mg/kg (Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 oral	4750 mg/kg
LD50 dermal rabbit	> 5000 mg/kg (Rabbit, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	> 9.7 mg/l (5 h, Rat, Experimental value, Inhalation)
LC50 Inhalation - Rat (Vapours)	9.7 mg/l
ALPHA-TERPINENE (99-86-5)	
LD50 oral	1680 mg/kg bodyweight
GAMMA-TERPINENE (99-85-4)	
LD50 oral	3650 mg/kg bodyweight
TERPINOLENE (586-62-9)	
LD50 oral rat	4390 mg/kg (Rat)
LD50 oral	3775 mg/kg bodyweight
LD50 dermal rabbit	> 5000 mg/kg (Rabbit)
EUCALYPTOL (470-82-6)	
LD50 oral rat	4500 mg/kg bodyweight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 oral	2480 mg/kg bodyweight
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 15 day(s))
ISOMENTHONE (491-07-6)	
LD50 oral	2219 mg/kg
PULEGONE (89-82-7)	
LD50 oral	470 mg/kg
LD50 dermal	3090 mg/kg
L-MENTHONE (14073-97-3)	
LD50 oral	2219 mg/kg
LINALOOL (78-70-6)	
LD50 oral	2790 mg/kg

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

PEPPERMINT ORGANIC OIL

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

BETA-MYRCENE (123-35-3)	
IARC group	2B - Possibly carcinogenic to humans
PULEGONE (89-82-7)	
IARC group	2B - Possibly carcinogenic to humans
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
4-TERPINEOL (562-74-3)	
STOT-single exposure	May cause drowsiness or dizziness.
STOT-repeated exposure	: Not classified
BETA-MYRCENE (123-35-3)	
LOAEL (oral, rat, 90 days)	250 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEL (subchronic, oral, animal/male, 90 days)	500 mg/kg bodyweight Animal: mouse, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEL (subchronic, oral, animal/female, 90 days)	250 mg/kg bodyweight Animal: mouse, Animal sex: female, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
EUCALYPTOL (470-82-6)	
NOAEL (oral, rat, 90 days)	600 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: other., Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents), Guideline: EPA OPPTS 870.3150 (90-Day Oral Toxicity in Non-rodents)
Aspiration hazard	: Not classified
ALPHA-PINENE (80-56-8)	
Viscosity, kinematic	No data available in the literature
BETA-PINENE (127-91-3)	
Viscosity, kinematic	2.5 mm ² /s (20 °C, Calculated)
L-LIMONENE (5989-54-8)	
Viscosity, kinematic	No data available in the literature
P-CYMENE (99-87-6)	
Viscosity, kinematic	1.03 mm ² /s (20 °C, OECD 114: Viscosity of Liquids)
EUCALYPTOL (470-82-6)	
Viscosity, kinematic	2.1 mm ² /s (40 °C, OECD 114: Viscosity of Liquids)

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: 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.

PEPPERMINT ORGANIC OIL

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

ALPHA-PINENE (80-56-8)	
LC50 - Fish [1]	0.303 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Danio rerio, Semi-static system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [1]	0.475 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Semi-static system, Fresh water, Experimental value, Locomotor effect)
BETA-PINENE (127-91-3)	
LC50 - Fish [1]	0.557 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Cyprinus carpio, Semi-static system, Fresh water, Weight of evidence, Other isomer)
ErC50 algae	0.826 mg/l (OECD 201: Alga, Growth Inhibition Test, 48 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Weight of evidence, Other isomer)
CAMPHENE (79-92-5)	
LC50 - Fish [1]	0.72 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Brachydanio rerio, Flow-through system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [1]	0.72 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Semi-static system, Fresh water, Experimental value, GLP)
EC50 72h - Algae [1]	> 1000 mg/l (OECD 201: Alga, Growth Inhibition Test, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)
L-LIMONENE (5989-54-8)	
LC50 - Fish [1]	0.71 mg/l (Equivalent or similar to OECD 203, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value, Similar product)
EC50 - Crustacea [1]	0.36 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Similar product)
EC50 96h - Algae [1]	0.904 mg/l (ECOSAR, Algae, Flow-through system, Fresh water, Estimated value)
BETA-MYRCENE (123-35-3)	
EC50 - Crustacea [1]	1.47 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	0.342 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	0.31 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
P-CYMENE (99-87-6)	
LC50 - Fish [1]	48 mg/l (EPA OPPTS 850.1075, 96 h, Cyprinodon variegatus, Static system, Salt water, Experimental value)
EC50 - Crustacea [1]	3.7 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Semi-static system, Fresh water, Experimental value, GLP)
EC50 72h - Algae [1]	4.03 mg/l (OECD 201: Alga, Growth Inhibition Test, Selenastrum capricornutum, Static system, Fresh water, Experimental value, GLP)
EUCALYPTOL (470-82-6)	
LC50 - Fish [1]	57 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Semi-static system, Fresh water, Experimental value, Nominal concentration)
EC50 - Crustacea [1]	> 100 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
EC50 72h - Algae [1]	> 74 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 96h - Algae [1]	> 74 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)

PEPPERMINT ORGANIC OIL

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

EUCALYPTOL (470-82-6)	
ErC50 algae	> 100 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Nominal concentration)
12.2. Persistence and degradability	
PEPPERMINT ORGANIC OIL	
Persistence and degradability	Rapidly degradable
ALPHA-PINENE (80-56-8)	
Persistence and degradability	Readily biodegradable in water.
BETA-PINENE (127-91-3)	
Persistence and degradability	Readily biodegradable in water.
CAMPHENE (79-92-5)	
Persistence and degradability	Not readily biodegradable in water.
4-TERPINEOL (562-74-3)	
Persistence and degradability	Rapidly degradable
3,7-DIMETHYLOCTA-1,3,6-TRIENE* (3338-55-4)	
Persistence and degradability	Rapidly degradable
CARVONE (99-49-0)	
Persistence and degradability	Rapidly degradable
(+)-NEOMENTHOL (2216-52-6)	
Persistence and degradability	Rapidly degradable
MENTHOFURAN (494-90-6)	
Persistence and degradability	Rapidly degradable
L-LIMONENE (5989-54-8)	
Persistence and degradability	Readily biodegradable in water.
ThOD	3.29 g O ₂ /g substance
BETA-MYRCENE (123-35-3)	
Persistence and degradability	Readily biodegradable in water.
P-CYMENE (99-87-6)	
Persistence and degradability	Readily biodegradable in water.
ALPHA-TERPINENE (99-86-5)	
Persistence and degradability	Rapidly degradable
GAMMA-TERPINENE (99-85-4)	
Persistence and degradability	Rapidly degradable
TERPINOLENE (586-62-9)	
Persistence and degradability	Forming sediments in water,Biodegradability in soil: no data available,Adsorbs into the soil.
ThOD	3.294 g O ₂ /g substance

PEPPERMINT ORGANIC OIL

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

EUCALYPTOL (470-82-6)	
Persistence and degradability	Readily biodegradable in water.
ISOMENTHONE (491-07-6)	
Persistence and degradability	Rapidly degradable
PULEGONE (89-82-7)	
Persistence and degradability	Rapidly degradable
L-MENTHONE (14073-97-3)	
Persistence and degradability	Rapidly degradable
MENTHYL ACETATE (16409-45-3)	
Persistence and degradability	Rapidly degradable
LINALOOL (78-70-6)	
Persistence and degradability	Rapidly degradable
MENTHOL (2216-51-5)	
Persistence and degradability	Rapidly degradable
BETA-CARYOPHYLLENE (87-44-5)	
Persistence and degradability	Rapidly degradable
12.3. Bioaccumulative potential	
ALPHA-PINENE (80-56-8)	
BCF - Other aquatic organisms [1]	1233.1 – 1248 l/kg (BCFBFAF v3.01, Read-across, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	4.487 (Experimental value, Equivalent or similar to OECD 107, 25 °C)
Bioaccumulative potential	Potential for bioaccumulation ($500 \leq \text{BCF} \leq 5000$).
BETA-PINENE (127-91-3)	
BCF - Fish [1]	1125 l/kg (BCFBFAF v3.01, Pisces, Fresh water, QSAR, Other isomer)
Partition coefficient n-octanol/water (Log Pow)	4.425 (Similar product, Read-across, Equivalent or similar to OECD 107, 25 °C)
Bioaccumulative potential	Potential for bioaccumulation ($4 \leq \text{Log Kow} \leq 5$).
CAMPHENE (79-92-5)	
BCF - Fish [1]	432 – 1290 (OECD 305: Bioconcentration: Flow-Through Fish Test, 8 week(s), Cyprinus carpio, Fresh water, Experimental value)
Partition coefficient n-octanol/water (Log Pow)	4.22 (Experimental value, Equivalent or similar to OECD 117, 37 °C)
Bioaccumulative potential	Potential for bioaccumulation ($500 \leq \text{BCF} \leq 5000$).
L-LIMONENE (5989-54-8)	
BCF - Fish [1]	683 l/kg (Calculated value)
Partition coefficient n-octanol/water (Log Pow)	4.38 (Experimental value, Equivalent or similar to OECD 117, 37 °C)
Bioaccumulative potential	Potential for bioaccumulation ($4 \leq \text{Log Kow} \leq 5$).
BETA-MYRCENE (123-35-3)	
Partition coefficient n-octanol/water (Log Pow)	5.285 (Literature, 25 °C)
Bioaccumulative potential	High potential for bioaccumulation ($\text{Log Kow} > 5$).

PEPPERMINT ORGANIC OIL

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

P-CYMENE (99-87-6)	
Partition coefficient n-octanol/water (Log Pow)	4.8 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 20 °C)
Bioaccumulative potential	Potential for bioaccumulation ($4 \leq \text{Log Kow} \leq 5$).
TERPINOLENE (586-62-9)	
Partition coefficient n-octanol/water (Log Pow)	4.23
EUCALYPTOL (470-82-6)	
BCF - Other aquatic organisms [1]	112 l/kg (Literature study, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	3.4 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method)
Bioaccumulative potential	Low potential for bioaccumulation ($\text{Log Kow} < 4$).
12.4. Mobility in soil	
ALPHA-PINENE (80-56-8)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.009 – 3.853 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Low potential for mobility in soil. May be harmful to plant growth, blooming and fruit formation.
BETA-PINENE (127-91-3)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.009 – 3.836 (log Koc, Calculated value, Other isomer)
Ecology - soil	Low potential for mobility in soil.
CAMPHENE (79-92-5)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.081 (log Koc, SRC PCKOCWIN v1.66, Calculated value)
Ecology - soil	Low potential for mobility in soil.
L-LIMONENE (5989-54-8)	
Surface tension	No data available in the literature
Ecology - soil	Low potential for mobility in soil.
BETA-MYRCENE (123-35-3)	
Ecology - soil	No (test)data on mobility of the substance available.
P-CYMENE (99-87-6)	
Surface tension	No data available in the literature
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	4.17 (log Koc, SRC PCKOCWIN v2.0, QSAR)
Ecology - soil	Low potential for mobility in soil.
EUCALYPTOL (470-82-6)	
Surface tension	61.5 mN/m (20 °C, 1 g/l, EU Method A.5: Surface tension)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.33 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value)
Ecology - soil	Low potential for adsorption in soil.

PEPPERMINT ORGANIC OIL

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

12.5. Results of PBT and vPvB assessment

Component

Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	ALPHA-PINENE (80-56-8), BETA-PINENE (127-91-3), CAMPHENE (79-92-5), L-LIMONENE (5989-54-8), P-CYMENE (99-87-6), EUCALYPTOL (470-82-6)
Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	ALPHA-PINENE (80-56-8), BETA-PINENE (127-91-3), CAMPHENE (79-92-5), L-LIMONENE (5989-54-8), P-CYMENE (99-87-6), EUCALYPTOL (470-82-6)

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional waste regulation	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Disposal must be done according to official regulations.
Additional information	: Do not re-use empty containers.

SECTION 14: Transport information

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

14.1. UN number or ID 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. (L-LIMONENE, BETA-PINENE)
Proper Shipping Name (IMDG)	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (L-LIMONENE, BETA-PINENE)
Proper Shipping Name (IATA)	: Environmentally hazardous substance, liquid, n.o.s. (L-LIMONENE, BETA-PINENE)
Proper Shipping Name (ADN)	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (L-LIMONENE, BETA-PINENE)
Proper Shipping Name (RID)	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (L-LIMONENE, BETA-PINENE)
Transport document description (ADR)	: UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (L-LIMONENE, BETA-PINENE), 9, III, (-)
Transport document description (IMDG)	: UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (L-LIMONENE, BETA-PINENE), 9, III, MARINE POLLUTANT
Transport document description (IATA)	: UN 3082 Environmentally hazardous substance, liquid, n.o.s. (L-LIMONENE, BETA-PINENE), 9, III
Transport document description (ADN)	: UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (L-LIMONENE, BETA-PINENE), 9, III
Transport document description (RID)	: UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (L-LIMONENE, BETA-PINENE), 9, III

PEPPERMINT ORGANIC OIL

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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

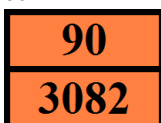
Classification code (ADR) : M6
Special provisions (ADR) : 274, 335, 375, 601, 650

PEPPERMINT ORGANIC OIL

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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, 375, 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)	: TP1, 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, A215
ERG code (IATA)	: 9L

Inland waterway transport

Classification code (ADN)	: M6
Special provisions (ADN)	: 274, 335, 375, 601, 650
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, 650
Limited quantities (RID)	: 5L
Excepted quantities (RID)	: E1
Packing instructions (RID)	: P001, IBC03, LP01, R001
Special packing provisions (RID)	: PP1

PEPPERMINT ORGANIC OIL

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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. Maritime transport in bulk according to IMO instruments

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

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)	
Reference code	Applicable on
3(a)	ALPHA-PINENE ; BETA-PINENE ; 3,7-DIMETHYLOCTA-1,3,6-TRIENE* ; L-LIMONENE ; BETA-MYRCENE ; P-CYMENE ; ALPHA-TERPINENE ; GAMMA-TERPINENE ; EUCALYPTOL
3(b)	PEPPERMINT ORGANIC OIL ; ALPHA-PINENE ; BETA-PINENE ; 4-TERPINEOL ; 3,7-DIMETHYLOCTA-1,3,6-TRIENE* ; CARVONE ; (+)-NEOMENTHOL ; MENTHOFURAN ; L-LIMONENE ; BETA-MYRCENE ; P-CYMENE ; ALPHA-TERPINENE ; GAMMA-TERPINENE ; TERPINOLENE ; EUCALYPTOL ; ISOMENTHONE ; PULEGONE ; L-MENTHONE ; LINALOOL ; MENTHOL ; BETA-CARYOPHYLLENE
3(c)	PEPPERMINT ORGANIC OIL ; ALPHA-PINENE ; BETA-PINENE ; 3,7-DIMETHYLOCTA-1,3,6-TRIENE* ; MENTHOFURAN ; L-LIMONENE ; BETA-MYRCENE ; P-CYMENE ; ALPHA-TERPINENE ; GAMMA-TERPINENE ; TERPINOLENE ; MENTHYL ACETATE
40.	ALPHA-PINENE ; BETA-PINENE ; CAMPHENE ; 3,7-DIMETHYLOCTA-1,3,6-TRIENE* ; L-LIMONENE ; BETA-MYRCENE ; P-CYMENE ; ALPHA-TERPINENE ; GAMMA-TERPINENE ; EUCALYPTOL

REACH Annex XIV (Authorisation List)

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

REACH Candidate List (SVHC)

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

PIC Regulation (Prior Informed Consent)

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

POP Regulation (Persistent Organic Pollutants)

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

Ozone Regulation (1005/2009)

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

Council Regulation (EC) for the control of dual-use items

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

Explosives Precursors Regulation (EU 2019/1148)

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

Drug Precursors Regulation (EC 273/2004)

Contains no 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)

PEPPERMINT ORGANIC OIL

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

15.1.2. National regulations

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Listed on the Canadian DSL (Domestic Substances List)

Germany

Water hazard class (WGK) : WGK 3, Highly hazardous to water (Classification according to AwSV, Annex 1).

Major Accidents Ordinance (12. BImSchV) : Is not subject to the Major Accidents Ordinance (12. BImSchV)

Netherlands

SZW-lijst van kankerverwekkende stoffen : None of the components are listed

SZW-lijst van mutagene stoffen : None of the components 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

Class for fire hazard : Class III-1

Store unit : 50 liter

Classification remarks : Flammable according to the Danish Ministry of Justice; 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

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
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
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

PEPPERMINT ORGANIC OIL

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Abbreviations and acronyms:	
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstracts Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Full text of H- and EUH-statements:	
Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3
Acute Tox. 3 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 3
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), 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
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Flam. Sol. 2	Flammable solids, Category 2
H226	Flammable liquid and vapour.
H228	Flammable solid.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H336	May cause drowsiness or dizziness.

PEPPERMINT ORGANIC OIL

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Full text of H- and EUH-statements:	
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.
Repr. 2	Reproductive toxicity, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1B	Skin sensitisation, category 1B
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Narcosis

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.