



LAVENDER 40/42 FOOD GRADE OIL

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 6/7/2021 Revision date: 4/10/2024 Supersedes version of: 3/8/2023 Version: 1.7

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

1.1. Product identifier

Product form : Mixture
Product name : LAVENDER 40/42 FOOD GRADE OIL
CAS-No. : N/A
Product code : 50-6155-63
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
Serious eye damage/eye irritation, Category 2 H319
Skin sensitisation, Category 1 H317
Hazardous to the aquatic environment – Chronic Hazard, Category 3 H412
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. Causes serious eye irritation. Harmful to aquatic life with long lasting effects.

2.2. Label elements

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

Hazard pictograms (CLP) :



GHS07

Signal word (CLP) :

Warning

Contains :

Linalyl acetate; eucalyptol; terpinen-4-ol; beta-pinene; l-Limonene; geraniol; linalool; alpha-pinene; beta-caryophyllene; geranyl acetate; 1-Octen-3-yl acetate

Hazard statements (CLP) :

H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.

LAVENDER 40/42 FOOD GRADE OIL

Safety Data Sheet

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

Precautionary statements (CLP)

H319 - Causes serious eye irritation.
H412 - Harmful to aquatic life with long lasting effects.
: P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
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.
P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P302+P352 - IF ON SKIN: Wash with plenty of water.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
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.
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 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	EUCALYPTOL (470-82-6), BETA-PINENE (127-91-3), l-Limonene (5989-54-8), CAMPHENE (79-92-5), D-LIMONENE (5989-27-5)(¹), PINENE (80-56-8)
Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	EUCALYPTOL (470-82-6), BETA-PINENE (127-91-3), l-Limonene (5989-54-8), CAMPHENE (79-92-5), D-LIMONENE (5989-27-5)(¹), PINENE (80-56-8)

(¹) Substance(s) in concentration below 0.1 % and displayed on a voluntary basis

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]
LINALYL ACETATE	CAS-No.: 115-95-7 EC-No.: 204-116-4	25 – 50	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317
LINALOOL	CAS-No.: 78-70-6	25 – 50	Eye Irrit. 2, H319 Skin Irrit. 2, H315 Skin Sens. 1B, H317
CAMPHOR	CAS-No.: 76-22-2	1 – 5	Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Oral), H302 Aquatic Chronic 2, H411 Eye Dam. 1, H318 Flam. Sol. 2, H228 Skin Irrit. 2, H315 STOT SE 2, H371

LAVENDER 40/42 FOOD GRADE 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]
EUCALYPTOL	CAS-No.: 470-82-6 EC-No.: 207-431-5	1 – 5	Flam. Liq. 3, H226 Skin Sens. 1B, H317
4-TERPINEOL	CAS-No.: 562-74-3 EC-No.: 209-235-5	1 – 5	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
BETA-CARYOPHYLLENE	CAS-No.: 87-44-5 EC-No.: 201-746-1	0.1 – 1	Skin Sens. 1B, H317 Asp. Tox. 1, H304
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
(E)- β -OCIMENE*	CAS-No.: 3779-61-1	0.1 – 1	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Asp. Tox. 1, H304 Aquatic Acute 1, H400 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
l-Limonene	CAS-No.: 5989-54-8 EC-No.: 227-815-6 EC Index-No.: 601-029-00-7	0.1 – 1	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
AMYLVINYL CARBINYL ACETATE	CAS-No.: 2442-10-6 EC-No.: 219-474-7	0.1 – 1	Acute Tox. 4 (Oral), H302 Skin Sens. 1B, H317
GERANIOL	CAS-No.: 106-24-1 EC-No.: 203-377-1	0.1 – 1	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317
GERANYL ACETATE	CAS-No.: 105-87-3 EC-No.: 203-341-5	0.1 – 1	Skin Irrit. 2, H315 Skin Sens. 1B, H317 Aquatic Chronic 3, H412
BETA-PINENE substance with national workplace exposure limit(s) (BE, ES)	CAS-No.: 127-91-3 EC-No.: 204-872-5	0.1 – 1	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
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

LAVENDER 40/42 FOOD GRADE 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]
PINENE substance with national workplace exposure limit(s) (BE, ES)	CAS-No.: 80-56-8 EC-No.: 201-291-9	0.1 – 1	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
D-LIMONENE substance with national workplace exposure limit(s) (DE, ES)	CAS-No.: 5989-27-5 EC-No.: 227-813-5 EC Index-No.: 601-096-00-2	< 0.1	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

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 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 inhalation	: Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard.
Symptoms/effects after skin contact	: Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Eye irritation.
Symptoms/effects after ingestion	: None under normal conditions.

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

LAVENDER 40/42 FOOD GRADE OIL

Safety Data Sheet

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

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 : Absorb spilled material with sand or earth. 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 : Store always 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

BETA-PINENE (127-91-3)

Belgium - Occupational Exposure Limits

Local name	Essence de térébenthine et monoterpènes sélectionnés # Terpentijn en geselecteerde monoterpene
------------	--

LAVENDER 40/42 FOOD GRADE OIL

Safety Data Sheet

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

BETA-PINENE (127-91-3)	
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
D-LIMONENE (5989-27-5)	
Germany - Occupational Exposure Limits (TRGS 900)	
Local name	(R)-p-Mentha-1,8-dien (D-Limonen)
AGW (OEL TWA)	28 mg/m ³ 5 ppm
Peak exposure limitation factor	4(II)
Remark	DFG,H,Sh,Y
Regulatory reference	TRGS900
Spain - Occupational Exposure Limits	
Local name	d-Limoneno
VLA-ED (OEL TWA)	168 mg/m ³ d-Limoneno 30 ppm d-Limoneno
Remark	Entrada en vigor en 2018. Sen (Sensibilizante. Véase Apartado 6), Vía dérmica (Indica que, en las exposiciones a esta sustancia, la aportación por la vía cutánea puede resultar significativa para el contenido corporal total si no se adoptan medidas para prevenir la absorción. En estas situaciones, es aconsejable la utilización del control biológico para poder cuantificar la cantidad global absorbida del contaminante. Para más información véase el Apartado 5 de este documento).
Regulatory reference	Límites de Exposición Profesional para Agentes Químicos en España 2024. INSHT
PINENE (80-56-8)	
Belgium - Occupational Exposure Limits	
Local name	Essence de térébenthine et monoterpènes sélectionés # Terpentijn en geselecteerde monoterenen
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

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

LAVENDER 40/42 FOOD GRADE OIL

Safety Data Sheet

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

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):



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	: 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	: 68.9 °C
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available

LAVENDER 40/42 FOOD GRADE OIL

Safety Data Sheet

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

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	: 0.886 (0.879 – 0.897)
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 : 1.458 (1.448 – 1.462)

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

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)

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))

LAVENDER 40/42 FOOD GRADE OIL

Safety Data Sheet

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

EUCALYPTOL (470-82-6)	
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))
4-TERPINEOL (562-74-3)	
LD50 oral	1300 mg/kg
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)
GERANIOL (106-24-1)	
LD50 oral	3600 mg/kg bodyweight
CAMPHOR (76-22-2)	
LD50 oral	1500 mg/kg
3,7-DIMETHYLOCTA-1,3,6-TRIENE* (3338-55-4)	
LD50 oral	5000 mg/kg bodyweight
LINALOOL (78-70-6)	
LD50 oral	2790 mg/kg
(E)-β-OCIMENE* (3779-61-1)	
LD50 oral	5000 mg/kg bodyweight
D-LIMONENE (5989-27-5)	
LD50 oral rat	> 2000 mg/kg bodyweight (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, Rat, Female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	> 5000 mg/kg bodyweight (Equivalent or similar to OECD 402, 24 h, Rabbit, Read-across, Dermal, 7 day(s))
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))
AMYLVINYL CARBINYL ACETATE (2442-10-6)	
LD50 oral	850 mg/kg bodyweight
Skin corrosion/irritation	: Causes skin irritation.
I-Limonene (5989-54-8)	
pH	No data available in the literature
Serious eye damage/irritation	: Causes serious eye irritation.
I-Limonene (5989-54-8)	
pH	No data available in the literature
Respiratory or skin sensitisation	: May cause an allergic skin reaction.

LAVENDER 40/42 FOOD GRADE OIL

Safety Data Sheet

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

Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

BETA-MYRCENE (123-35-3)

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.

CAMPHOR (76-22-2)

STOT-single exposure : May cause damage to organs.

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

EUCALYPTOL (470-82-6)

Viscosity, kinematic : 2.1 mm²/s (40 °C, OECD 114: Viscosity of Liquids)

BETA-PINENE (127-91-3)

Viscosity, kinematic : 2.5 mm²/s (20 °C, Calculated)

l-Limonene (5989-54-8)

Viscosity, kinematic : No data available in the literature

D-LIMONENE (5989-27-5)

Viscosity, kinematic : No data available in the literature

PINENE (80-56-8)

Viscosity, kinematic : No data available in the literature

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Harmful 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) : Harmful to aquatic life with long lasting effects.

LAVENDER 40/42 FOOD GRADE OIL

Safety Data Sheet

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

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)
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)
ErC50 algae	> 100 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Nominal concentration)
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)
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)
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)
D-LIMONENE (5989-27-5)	
LC50 - Fish [1]	720 µg/l (Equivalent or similar to OECD 203, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value)
LC50 - Fish [2]	702 µg/l Test organisms (species): Pimephales promelas
EC50 - Crustacea [1]	0.307 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Semi-static system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [2]	0.51 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	0.32 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)

LAVENDER 40/42 FOOD GRADE OIL

Safety Data Sheet

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

D-LIMONENE (5989-27-5)	
EC50 72h - Algae [2]	0.214 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
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)
12.2. Persistence and degradability	
LAVENDER 40/42 FOOD GRADE OIL (N/A)	
Persistence and degradability	Rapidly degradable
LINALYL ACETATE (115-95-7)	
Persistence and degradability	Rapidly degradable
BETA-MYRCENE (123-35-3)	
Persistence and degradability	Readily biodegradable in water.
EUCALYPTOL (470-82-6)	
Persistence and degradability	Readily biodegradable in water.
4-TERPINEOL (562-74-3)	
Persistence and degradability	Rapidly degradable
BETA-PINENE (127-91-3)	
Persistence and degradability	Readily biodegradable in water.
I-Limonene (5989-54-8)	
Persistence and degradability	Readily biodegradable in water.
ThOD	3.29 g O ₂ /g substance
CAMPHENE (79-92-5)	
Persistence and degradability	Not readily biodegradable in water.
GERANIOL (106-24-1)	
Persistence and degradability	Rapidly degradable
CAMPHOR (76-22-2)	
Persistence and degradability	Rapidly degradable
3,7-DIMETHYLOCTA-1,3,6-TRIENE* (3338-55-4)	
Persistence and degradability	Rapidly degradable
LINALOOL (78-70-6)	
Persistence and degradability	Rapidly degradable
(E)-β-OCIMENE* (3779-61-1)	
Persistence and degradability	Rapidly degradable
D-LIMONENE (5989-27-5)	
Persistence and degradability	Readily biodegradable in water.

LAVENDER 40/42 FOOD GRADE OIL

Safety Data Sheet

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

D-LIMONENE (5989-27-5)	
ThOD	3.29 g O ₂ /g substance
PINENE (80-56-8)	
Persistence and degradability	Readily biodegradable in water.
BETA-CARYOPHYLLENE (87-44-5)	
Persistence and degradability	Rapidly degradable
GERANYL ACETATE (105-87-3)	
Persistence and degradability	Rapidly degradable
AMYLVINYL CARBINYL ACETATE (2442-10-6)	
Persistence and degradability	Rapidly degradable
12.3. Bioaccumulative potential	
BETA-MYRCENE (123-35-3)	
Partition coefficient n-octanol/water (Log Pow)	5.285 (Literature, 25 °C)
Bioaccumulative potential	High potential for bioaccumulation (Log Kow > 5).
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 (Log Kow < 4).
BETA-PINENE (127-91-3)	
BCF - Fish [1]	1125 l/kg (BCFBAF 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 ≤ Log Kow ≤ 5).
I-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 ≤ Log Kow ≤ 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 ≤ BCF ≤ 5000).
D-LIMONENE (5989-27-5)	
BCF - Fish [1]	864.8 l/kg (BCFBAF v3.01, Pisces, QSAR, Fresh weight)
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 ≤ Log Kow ≤ 5).
PINENE (80-56-8)	
BCF - Other aquatic organisms [1]	1233.1 – 1248 l/kg (BCFBAF v3.01, Read-across, Fresh weight)

LAVENDER 40/42 FOOD GRADE OIL

Safety Data Sheet

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

PINENE (80-56-8)	
Partition coefficient n-octanol/water (Log Pow)	4.487 (Experimental value, Equivalent or similar to OECD 107, 25 °C)
Bioaccumulative potential	Potential for bioaccumulation ($500 \leq BCF \leq 5000$).

12.4. Mobility in soil

BETA-MYRCENE (123-35-3)	
Ecology - soil	No (test)data on mobility of the substance available.

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.

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.

l-Limonene (5989-54-8)	
Surface tension	No data available in the literature
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.

D-LIMONENE (5989-27-5)	
Surface tension	No data available in the literature
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.049 – 3.801 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Low potential for mobility in soil.

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.

12.5. Results of PBT and vPvB assessment

Component	
Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	EUCALYPTOL (470-82-6), BETA-PINENE (127-91-3), l-Limonene (5989-54-8), CAMPHENE (79-92-5), D-LIMONENE (5989-27-5) ⁽¹⁾ , PINENE (80-56-8)
Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	EUCALYPTOL (470-82-6), BETA-PINENE (127-91-3), l-Limonene (5989-54-8), CAMPHENE (79-92-5), D-LIMONENE (5989-27-5) ⁽¹⁾ , PINENE (80-56-8)

⁽¹⁾ Substance(s) in concentration below 0.1 % and displayed on a voluntary basis

LAVENDER 40/42 FOOD GRADE OIL

Safety Data Sheet

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

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

Not regulated for transport

14.2. UN proper shipping name

Proper Shipping Name (ADR)	: Not regulated
Proper Shipping Name (IMDG)	: Not regulated
Proper Shipping Name (IATA)	: Not regulated
Proper Shipping Name (ADN)	: Not regulated
Proper Shipping Name (RID)	: Not regulated

14.3. Transport hazard class(es)

ADR
Transport hazard class(es) (ADR) : Not regulated

IMDG
Transport hazard class(es) (IMDG) : Not regulated

IATA
Transport hazard class(es) (IATA) : Not regulated

ADN
Transport hazard class(es) (ADN) : Not regulated

RID
Transport hazard class(es) (RID) : Not regulated

14.4. Packing group

Packing group (ADR)	: Not regulated
Packing group (IMDG)	: Not regulated
Packing group (IATA)	: Not regulated
Packing group (ADN)	: Not regulated
Packing group (RID)	: Not regulated

14.5. Environmental hazards

Other information : No supplementary information available

LAVENDER 40/42 FOOD GRADE OIL

Safety Data Sheet

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

14.6. Special precautions for user

Overland transport

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

Inland waterway transport

Not regulated

Rail transport

Not regulated

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)	EUCALYPTOL ; BETA-PINENE ; I-Limonene ; 3,7-DIMETHYLOCTA-1,3,6-TRIENE* ; (E)- β -OCIMENE* ; D-LIMONENE ; PINENE
3(b)	LAVENDER 40/42 FOOD GRADE OIL ; LINALYL ACETATE ; BETA-CARYOPHYLLENE ; EUCALYPTOL ; 4-TERPINEOL ; BETA-PINENE ; I-Limonene ; GERANIOL ; CAMPHOR ; 3,7-DIMETHYLOCTA-1,3,6-TRIENE* ; LINALOOL ; (E)- β -OCIMENE* ; GERANYL ACETATE ; D-LIMONENE ; PINENE
3(c)	LAVENDER 40/42 FOOD GRADE OIL ; BETA-CARYOPHYLLENE ; BETA-PINENE ; I-Limonene ; CAMPHOR ; 3,7-DIMETHYLOCTA-1,3,6-TRIENE* ; (E)- β -OCIMENE* ; GERANYL ACETATE ; D-LIMONENE ; PINENE
40.	EUCALYPTOL ; BETA-PINENE ; I-Limonene ; CAMPHENE ; CAMPHOR ; 3,7-DIMETHYLOCTA-1,3,6-TRIENE* ; (E)- β -OCIMENE* ; D-LIMONENE ; PINENE

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)

Dual-Use Regulation (428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

Explosives Precursors Regulation (2019/1148)

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

LAVENDER 40/42 FOOD GRADE OIL

Safety Data Sheet

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

Drug Precursors Regulation (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)

15.1.2. National regulations

Germany

Water hazard class (WGK) : Not classified according to Regulation Governing Systems for Handling Substances Hazardous to Waters (AwSV).

Hazardous Incident Ordinance (12. BImSchV) : Is not subject to the Hazardous Incident 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

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
Pregnant/breastfeeding women working with the product must not be in direct contact with 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

LAVENDER 40/42 FOOD GRADE OIL

Safety Data Sheet

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

Abbreviations and acronyms:	
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
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 Abstract 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. 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
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. 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.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.

LAVENDER 40/42 FOOD GRADE 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:

H332	Harmful if inhaled.
H336	May cause drowsiness or dizziness.
H371	May cause damage to organs.
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.
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1B	Skin sensitisation, category 1B
STOT SE 2	Specific target organ toxicity – Single exposure, Category 2
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.