EarthOil
By Univar Solutions

SAFETY DATA SHEET
LAVENDER, LAVANDULA HYBRIDA, EXT

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

1.1. Product identifier

Product name LAVENDER, LAVANDULA HYBRIDA, EXT

Product number 55419

Synonyms; trade names LAVANDIN SUPER OIL ORGANIC, LAVANDIN SUPER OIL, LAVANDULA HYBRIDA OIL

REACH registration number 01-2120736147-55-XXXX

CAS number 91722-69-9

EC number 294-470-6

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

Identified uses Industrial application Cosmetics Personal Care Fragrance

1.3. Details of the supplier of the safety data sheet

Supplier
Univar
Aquarius House
6 Mid Point Business Park
Bradford
BD3 7AY
+44 1274 267300
+44 1274 267306
SDS.EMEA@univarsolutions.com

1.4. Emergency telephone number

Emergency telephone SGS - +32 (0)3 575 55 55 (24h)

Sds No. 55419

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Eye Irrit. 2 - H319 Skin Sens. 1 - H317

Environmental hazards Aquatic Chronic 3 - H412

2.2. Label elements

EC number 294-470-6

Hazard pictograms

Signal word Warning

LAVENDER, LAVANDULA HYBRIDA, EXT

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

Precautionary statements
P264 Wash contaminated skin thoroughly after handling.
P273 Avoid release to the environment.
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.
P501 Dispose of contents/ container in accordance with national regulations.

Contains
LINALOOL, LINALYL ACETATE, EUCALYPTOL, CARYOPHYLLENE, LIMONENE, GERANIOL, 2-PINENE, NERYL ACETATE

2.3. Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria.

SECTION 3: Composition/information on ingredients

3.1. Substances

LINALOOL **30-60%**

CAS number: 78-70-6 EC number: 201-134-4 REACH registration number: 01-2119474016-42-XXXX

Classification
Skin Irrit. 2 - H315
Eye Irrit. 2 - H319
Skin Sens. 1B - H317

LINALYL ACETATE **30-60%**

CAS number: 115-95-7 EC number: 204-116-4 REACH registration number: 01-2119454789-19-XXXX

Classification
Skin Irrit. 2 - H315
Eye Irrit. 2 - H319
Skin Sens. 1 - H317

CAMPHOR **5-10%**

CAS number: 76-22-2 EC number: 200-945-0 REACH registration number: 01-2119966156-31-XXXX

Classification
Flam. Sol. 2 - H228
Acute Tox. 4 - H302
Acute Tox. 4 - H332
Skin Irrit. 2 - H315
Eye Dam. 1 - H318
STOT SE 2 - H371

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EUCALYPTOL **5-10%**

CAS number: 470-82-6 EC number: 207-431-5 REACH registration number: 01-2119967772-24-XXXX

Classification
Flam. Liq. 3 - H226
Skin Sens. 1B - H317

CARYOPHYLLENE **1-5%**

CAS number: 87-44-5 EC number: 201-746-1 REACH registration number: 01-2120745237-53-XXXX

Classification
Skin Sens. 1 - H317
Asp. Tox. 1 - H304
Aquatic Chronic 4 - H413

DL-BORNEOL **1-5%**

CAS number: 507-70-0 EC number: 208-080-0

Classification
Flam. Sol. 2 - H228
Acute Tox. 4 - H332
Skin Irrit. 2 - H315
Eye Dam. 1 - H318
STOT SE 2 - H371

(Z)-3,7-DIMETHYLOCTA-1,3,6,-TRIENE **<1%**

CAS number: 3338-55-4 EC number: 222-081-3

M factor (Acute) = 1

Classification
Flam. Liq. 3 - H226
Skin Irrit. 2 - H315
Asp. Tox. 1 - H304
Aquatic Acute 1 - H400
Aquatic Chronic 2 - H411

LIMONENE **<1%**

CAS number: 138-86-3 EC number: 205-341-0

M factor (Acute) = 1 M factor (Chronic) = 1

Classification
Flam. Liq. 3 - H226
Skin Irrit. 2 - H315
Skin Sens. 1 - H317
Aquatic Acute 1 - H400
Aquatic Chronic 1 - H410

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GERANIOL		**<1%**
CAS number: 106-24-1	EC number: 203-377-1	REACH registration number: 01-2119552430-49-XXXX

Classification
Skin Irrit. 2 - H315
Eye Dam. 1 - H318
Skin Sens. 1 - H317

2-PINENE		**<1%**
CAS number: 80-56-8	EC number: 201-291-9	
M factor (Acute) = 1	M factor (Chronic) = 1	

Classification
Flam. Liq. 3 - H226
Acute Tox. 4 - H302
Skin Irrit. 2 - H315
Skin Sens. 1 - H317
Asp. Tox. 1 - H304
Aquatic Acute 1 - H400
Aquatic Chronic 1 - H410

NERYL ACETATE		**<1%**
CAS number: 141-12-8	EC number: 205-459-2	

Classification
Skin Irrit. 2 - H315
Skin Sens. 1B - H317
Aquatic Chronic 3 - H412

The full text for all hazard statements is displayed in Section 16.

Product name LAVENDER, LAVANDULA HYBRIDA, EXT

REACH registration number 01-2120736147-55-XXXX

CAS number 91722-69-9

EC number 294-470-6

Composition comments The data shown are in accordance with the latest EC Directives.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention if symptoms are severe or persist.

Ingestion Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Rinse mouth thoroughly with water. Give a few small glasses of water or milk to drink. Get medical attention if symptoms are severe or persist.

Skin contact Take off immediately all contaminated clothing. Wash skin thoroughly with soap and water. Continue to rinse. Get medical attention if symptoms are severe or persist.

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Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if symptoms are severe or persist.

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

Skin contact	May cause an allergic skin reaction. Symptoms following overexposure may include the following: Irritation. Redness.
Eye contact	Causes serious eye irritation. Symptoms following overexposure may include the following: Pain or irritation. Profuse watering of the eyes. Redness.

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

Notes for the doctor	Treat symptomatically. Contact specialist immediately poison treatment if large quantities have been ingested or inhaled

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Use fire-extinguishing media suitable for the surrounding fire.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

5.3. Advice for firefighters

Protective actions during firefighting	Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Follow precautions for safe handling described in this safety data sheet. Avoid inhalation of vapours and contact with skin and eyes. Provide adequate ventilation.

6.2. Environmental precautions

Environmental precautions	Avoid the spillage or runoff entering drains, sewers or watercourses. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	Absorb spillage with inert, damp, non-combustible material. Flush contaminated area with plenty of water. Collect and place in suitable waste disposal containers and seal securely. Provide adequate ventilation.

6.4. Reference to other sections

Reference to other sections	Wear protective clothing as described in Section 8 of this safety data sheet. Collect and dispose of spillage as indicated in Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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Usage precautions Wear protective clothing as described in Section 8 of this safety data sheet. Avoid inhalation of vapours and contact with skin and eyes. In case of insufficient ventilation, wear suitable respiratory equipment. Provide adequate ventilation.

Advice on general occupational hygiene Do not eat, drink or smoke when using this product. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place. Avoid exposure to high temperatures or direct sunlight.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

CAMPHOR

Long-term exposure limit (8-hour TWA): WEL 2 ppm 13 mg/m³
Short-term exposure limit (15-minute): WEL 3 ppm 19 mg/m³
WEL = Workplace Exposure Limit.

LINALOOL (CAS: 78-70-6)

Ingredient comments No exposure limits known for ingredient(s).

DNEL
Industry - Dermal; Short term systemic effects: 5 mg/kg/day
Industry - Inhalation; Short term systemic effects: 16.5 mg/m³
Industry - Dermal; Long term systemic effects: 2.5 mg/kg/day
Industry - Inhalation; Long term systemic effects: 2.8 mg/m³
Consumer - Dermal; Short term systemic effects: 2.5 mg/kg/day
Consumer - Inhalation; Short term systemic effects: 4.1 mg/m³
Consumer - Oral; Short term systemic effects: 1.2 mg/kg/day
Consumer - Inhalation; Long term systemic effects: 0.7 mg/m³
Consumer - Oral; Long term systemic effects: 0.2 mg/kg/day
Consumer - Dermal; Short term local effects: 15 mg/cm²
Workers - Dermal; Long term local effects: 15 mg/cm²
Consumer - Dermal; Long term local effects: 15 mg/cm²

PNEC
- Fresh water; 0.2 mg/l
- marine water; 0.02 mg/l
- Sediment (Freshwater); 2.22 mg/kg
- Sediment (Marinewater); 0.222 mg/kg
- Soil; 0.327 mg/kg
- STP; > 10 mg/l

LINALYL ACETATE (CAS: 115-95-7)

DNEL
Industry - Dermal; Long term systemic effects: 2.5 mg/kg/day
Industry - Inhalation; Long term systemic effects: 2.75 mg/m³
Consumer - Inhalation; Long term systemic effects: 0.68 mg/m³
Workers - Dermal; Short term local effects: 8 mg/cm²
Workers - Dermal; Long term local effects: 8 mg/cm²
Consumer - Dermal; Short term local effects: 8 mg/cm²
Consumer - Dermal; Long term local effects: 8 mg/cm²

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PNEC

- Fresh water; 0.011 mg/l
- marine water; 0.0011 mg/l
- Sediment (Freshwater); 0.609 mg/kg
- Sediment (Marinewater); 0.0609 mg/kg
- Soil; 0.115 mg/kg
- STP; 10 mg/l

EUCALYPTOL (CAS: 470-82-6)

DNEL

Workers - Dermal; Long term systemic effects: 2 mg/kg
Workers - Inhalation; Long term systemic effects: 7.05 mg/kg
Consumer - Dermal; Long term systemic effects: 1 mg/kg/day
Consumer - Inhalation; Long term systemic effects: 1.74 mg/m³

PNEC

STP; 10 mg/l
Soil; 0.2 mg/kg
Fresh water; 0.057 mg/l
marine water; 0.0057 mg/l
Sediment (Freshwater); 0.06732 mg/kg
Sediment (Marinewater); 0.00673 mg/kg

LIMONENE (CAS: 138-86-3)

Ingredient comments

No exposure limits known for ingredient(s).

DNEL

Workers - Dermal; Short term : 222 µg/cm2
Workers - Inhalation; Long term : 33.3 mg/m³
General population - Dermal; Short term : 111 µg/cm2
General population - Inhalation; Long term : 8.33 mg/m³
General population - Oral; Long term : 4.76 mg/kg

PNEC

Fresh water; 5.4 µg/l
marine water; 0.54 µg/l
STP; 1.8 mg/l
Sediment (Freshwater); 1.649 mg/kg/day
Sediment (Marinewater); 0.165 mg/kg/day
Soil; 0.328 mg/kg

GERANIOL (CAS: 106-24-1)

DNEL

Workers - Inhalation; Long term systemic effects: 161.6 mg/l
Workers - Dermal; Long term systemic effects: 12.5 mg/kg
Consumer - Oral; Long term systemic effects: 13.75 mg/kg
Consumer - Inhalation; Long term systemic effects: 47.8 mg/m³
Consumer - Dermal; Long term systemic effects: 7.5 mg/kg

8.2. Exposure controls

Protective equipment



Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Tight-fitting safety glasses. Personal protective equipment for eye and face protection should comply with European Standard EN166.

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Hand protection	The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The selected gloves should have a breakthrough time of at least 8 hours. Polyvinyl chloride (PVC). Protective gloves should have a minimum thickness of 0.35 mm. To protect hands from chemicals, gloves should comply with European Standard EN374.
Other skin and body protection	Wear appropriate clothing to prevent any possibility of skin contact.
Hygiene measures	Wash at the end of each work shift and before eating, smoking and using the toilet. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site.
Respiratory protection	Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. If ventilation is inadequate, suitable respiratory protection must be worn. EN 136/140/141/145/143/149

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Light. Yellow. to Yellow.
Odour	Characteristic.
Odour threshold	No information available.
pH	No information available.
Melting point	No information available.
Initial boiling point and range	No information available.
Flash point	74°C
Evaporation rate	No information available.
Evaporation factor	No information available.
Flammability (solid, gas)	No information available.
Upper/lower flammability or explosive limits	No information available.
Other flammability	No information available.
Vapour pressure	No information available.
Vapour density	No information available.
Relative density	0.886 - 0.896 @ 20°C
Bulk density	No information available.
Solubility(ies)	No information available.
Partition coefficient	No information available.
Auto-ignition temperature	No information available.
Decomposition Temperature	No information available.
Viscosity	No information available.

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Explosive properties	Not considered to be explosive.
Explosive under the influence of a flame	No information available.
Oxidising properties	Does not meet the criteria for classification as oxidising.

9.2. Other information

Refractive index	1.456 - 1.461
Particle size	No information available.
Molecular weight	No information available.
Volatility	No information available.
Saturation concentration	No information available.
Critical temperature	No information available.
Volatile organic compound	No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No test data specifically related to reactivity available for this product or its ingredients.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Under normal conditions of storage and use, no hazardous reactions will occur.

10.4. Conditions to avoid

Conditions to avoid Avoid exposure to high temperatures or direct sunlight.

10.5. Incompatible materials

Materials to avoid No specific recommendations.

10.6. Hazardous decomposition products

Hazardous decomposition products Does not decompose when used and stored as recommended. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg)	21,906.35

Acute toxicity - inhalation

ATE inhalation (gases ppm)	75,250.84
ATE inhalation (vapours mg/l)	183.95
ATE inhalation (dusts/mists mg/l)	18.82

Skin corrosion/irritation

Skin corrosion/irritation No information available.

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Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye irritation.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation May cause an allergic skin reaction.

Germ cell mutagenicity

Genotoxicity - in vitro No information available.

Carcinogenicity

Carcinogenicity No information available.

Reproductive toxicity

Reproductive toxicity - fertility No information available.

Reproductive toxicity - development No information available.

Specific target organ toxicity - single exposure

STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure No information available.

Aspiration hazard

Aspiration hazard No information available.

Inhalation Gas or vapour in high concentrations may irritate the respiratory system.

Ingestion The product irritates mucous membranes and may cause abdominal discomfort if swallowed.

Skin contact May cause an allergic skin reaction. Symptoms following overexposure may include the following: Irritation. Redness.

Eye contact Causes serious eye irritation.

Toxicological information on ingredients.

LINALOOL

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg) 2,790.0

Species Rat

Notes (oral LD_{50}) LD_{50} 2790 mg/kg, Oral, Rat

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg) 5,610.0

Species Rabbit

Notes (dermal LD_{50}) LD_{50} 5610 mg/kg, Dermal, Rabbit

Skin corrosion/irritation

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Skin corrosion/irritation Irritating to skin. Rabbit

Serious eye damage/irritation

Serious eye damage/irritation Slightly irritating. Rabbit

Skin sensitisation

Skin sensitisation May cause an allergic skin reaction. - Rabbit: Sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro Bacterial reverse mutation test: Negative.

Carcinogenicity

Carcinogenicity No information available.

Reproductive toxicity

Reproductive toxicity - fertility No information available.

Specific target organ toxicity - single exposure

STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure NOAEL 117 mg/kg, Oral, Rat NOAEL 250 mg/kg, Dermal, Rat

Aspiration hazard

Aspiration hazard No information available.

Inhalation May cause respiratory irritation.

Ingestion Ingestion may cause severe irritation of the mouth, the oesophagus and the gastrointestinal tract.

Skin contact Irritating to skin. May cause an allergic skin reaction.

Eye contact Causes eye irritation.

LINALYL ACETATE

Acute toxicity - oral

Notes (oral LD_{50}) LD_{50} 9000 mg/kg, Oral, Rat

Acute toxicity - dermal

Notes (dermal LD_{50}) LD_{50} >5000 mg/kg, Dermal, Rabbit

Skin corrosion/irritation

Skin corrosion/irritation Causes skin irritation.
Irritating to skin. Rabbit

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye irritation.
Irritating to eyes. Rabbit

Respiratory sensitisation

Respiratory sensitisation Not sensitising.

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Skin sensitisation

Skin sensitisation	- Guinea pig: Not sensitising.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	NOAEL 117 mg/kg, Oral, Rat

CAMPHOR

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	1,310.0
Species	Rat
ATE oral (mg/kg)	1,310.0

Acute toxicity - dermal

Notes (dermal LD_{50})	LD_{50} > 2000 mg/kg, Dermal, Rabbit

Acute toxicity - inhalation

Notes (inhalation LC_{50})	Harmful if inhaled.

Skin corrosion/irritation

Skin corrosion/irritation	Causes skin irritation.

Serious eye damage/irritation

Serious eye damage/irritation	Causes serious eye damage.

Respiratory sensitisation

Respiratory sensitisation	No information available.

Skin sensitisation

Skin sensitisation	No information available.

Germ cell mutagenicity

Genotoxicity - in vitro	No information available.

Carcinogenicity

Carcinogenicity	No information available.

Reproductive toxicity

Reproductive toxicity - fertility	No information available.

Specific target organ toxicity - single exposure

STOT - single exposure	May cause damage to organs (Lungs) if inhaled.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	No information available.

Aspiration hazard

Aspiration hazard	No information available.

Inhalation	Harmful if inhaled. Dust in high concentrations may irritate the respiratory system.

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Ingestion	Harmful if swallowed.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye damage. Particles in the eyes may cause irritation and smarting.
Acute and chronic health hazards	May cause damage to organs (Lungs) if inhaled.
Route of exposure	Inhalation
Target organs	Lungs

EUCALYPTOL

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	2,480.0
Species	Rat
Notes (oral LD_{50})	LD_{50} 2480 mg/kg, Oral, Rat
ATE oral (mg/kg)	2,480.0

Acute toxicity - dermal

Notes (dermal LD_{50})	LD_{50} >5000 mg/kg, Dermal, Rabbit

Skin corrosion/irritation

Skin corrosion/irritation	No information available.

Serious eye damage/irritation

Serious eye damage/irritation	No information available.

Respiratory sensitisation

Respiratory sensitisation	No information available.

Skin sensitisation

Skin sensitisation	May cause an allergic skin reaction.

Germ cell mutagenicity

Genotoxicity - in vitro	No information available.

Carcinogenicity

Carcinogenicity	No information available.

Reproductive toxicity

Reproductive toxicity - fertility	No information available.
Reproductive toxicity - development	No information available.

Specific target organ toxicity - single exposure

STOT - single exposure	No information available.

Specific target organ toxicity - repeated exposure

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STOT - repeated exposure	No information available.

Aspiration hazard

Aspiration hazard	No information available.
Inhalation	Gas or vapour in high concentrations may irritate the respiratory system.
Ingestion	Ingestion may cause severe irritation of the mouth, the oesophagus and the gastrointestinal tract.
Skin contact	May cause an allergic skin reaction.
Eye contact	May cause temporary eye irritation.

CARYOPHYLLENE

Skin sensitisation

Skin sensitisation	May cause an allergic skin reaction.

Germ cell mutagenicity

Genotoxicity - in vitro	Bacterial reverse mutation test: Negative.

Aspiration hazard

Aspiration hazard	May be fatal if swallowed and enters airways.

DL-BORNEOL

Acute toxicity - inhalation

ATE inhalation (dusts/mists mg/l)	1.5

1-METHYL 4-ISO PROPYL-1-CYCLOHEXEN-8-OL

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	4,300.0
Species	Rat
Notes (oral LD_{50})	LD_{50} 4300 mg/kg, Oral, Rat
ATE oral (mg/kg)	4,300.0

Acute toxicity - dermal

Notes (dermal LD_{50})	LD_{50} > 3000 mg/kg, Dermal, Rabbit

Skin corrosion/irritation

Skin corrosion/irritation	Irritating to skin. Rabbit

Serious eye damage/irritation

Serious eye damage/irritation	Irritating to eyes. Rabbit

Skin sensitisation

Skin sensitisation	Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising.

Germ cell mutagenicity

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Genotoxicity - in vitro	Bacterial reverse mutation test: Negative.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	NOAEL 314 mg/kg, Oral, Rat (90 days ; 7 days/week)

LIMONENE

Skin corrosion/irritation

Skin corrosion/irritation	Causes skin irritation.

Serious eye damage/irritation

Serious eye damage/irritation	No information available.

Respiratory sensitisation

Respiratory sensitisation	No information available.

Skin sensitisation

Skin sensitisation	May cause an allergic skin reaction.

Germ cell mutagenicity

Genotoxicity - in vitro	No information available.

Carcinogenicity

Carcinogenicity	No information available.

Reproductive toxicity

Reproductive toxicity - fertility	No information available.

Specific target organ toxicity - single exposure

STOT - single exposure	No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	No information available.

Aspiration hazard

Aspiration hazard	No information available.

Inhalation	Irritating to respiratory system. May cause damage to mucous membranes in nose, throat, lungs and bronchial system.
Ingestion	Liquid irritates mucous membranes and may cause abdominal pain if swallowed.
Skin contact	Irritating to skin. May cause an allergic skin reaction.
Eye contact	May cause temporary eye irritation.

MYRCENE

Acute toxicity - oral

Notes (oral LD_{50})	LD_{50} > 5000 mg/kg, Oral, Rat

Acute toxicity - dermal

Notes (dermal LD_{50})	LD_{50} > 5000 mg/kg, Dermal, Rabbit

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GERANIOL

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	3,600.0
Species	Rat
Notes (oral LD_{50})	LD_{50} 3600 mg/kg, Oral, Rat
ATE oral (mg/kg)	3,600.0

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	5,001.0
Species	Rabbit
Notes (dermal LD_{50})	LD_{50} > 5000 mg/kg, Dermal, Rabbit
ATE dermal (mg/kg)	5,001.0

Skin corrosion/irritation

Skin corrosion/irritation	Causes skin irritation. Severe skin irritation. Rabbit

Serious eye damage/irritation

Serious eye damage/irritation	Causes serious eye damage. Severe irritation. Cornea score: 3.1 - Rabbit

Skin sensitisation

Skin sensitisation	May cause an allergic skin reaction. Local Lymph Node Assay (LLNA) - Mouse: Sensitising.

2-PINENE

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	500.0
Species	Rat
Notes (oral LD_{50})	LD_{50} 3700 mg/kg, Oral, Rat
ATE oral (mg/kg)	500.0

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	5,000.0
Species	Rat
Notes (dermal LD_{50})	LD_{50} 5000 mg/kg, Dermal, Rat
ATE dermal (mg/kg)	5,000.0

Inhalation	May cause respiratory system irritation.
Ingestion	Harmful: may cause lung damage if swallowed.

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Skin contact	May cause sensitisation by skin contact.
Eye contact	Irritating to eyes.

(1E,6E)-1-METHYL-5-METHYLIDENE-8-PROPAN-2-YLCYCLODECA-1,6-DIENE

Acute toxicity - oral

ATE oral (mg/kg)	500.0

LEVOMENOL

Skin corrosion/irritation

Skin corrosion/irritation	No information available.

Serious eye damage/irritation

Serious eye damage/irritation	No information available.

Respiratory sensitisation

Respiratory sensitisation	No information available.

Skin sensitisation

Skin sensitisation	No information available.

Germ cell mutagenicity

Genotoxicity - in vitro	No information available.

Carcinogenicity

Carcinogenicity	No information available.

Reproductive toxicity

Reproductive toxicity - fertility	No information available.

Specific target organ toxicity - single exposure

STOT - single exposure	No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	No information available.

Aspiration hazard

Aspiration hazard	No information available.

Inhalation	May cause respiratory system irritation.
Ingestion	May cause discomfort if swallowed.
Skin contact	Liquid may irritate skin.
Eye contact	May cause temporary eye irritation.

NERYL ACETATE

Acute toxicity - oral

Notes (oral LD_{50})	LD_{50} > 5000 mg/kg, Oral, Rat

Acute toxicity - dermal

Notes (dermal LD_{50}) LD_{50} > 5000 mg/kg, Dermal, Rabbit

Skin sensitisation

Summary May cause an allergic skin reaction.

Skin sensitisation Guinea pig maximization test (GPMT) - Guinea pig: Sensitising.

SECTION 12: Ecological information

Ecotoxicity Harmful to aquatic life with long lasting effects.

Ecological information on ingredients.

LINALOOL

Ecotoxicity The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

CAMPHOR

Ecotoxicity The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

EUCALYPTOL

Ecotoxicity The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

CARYOPHYLLENE

Ecotoxicity May cause long lasting harmful effects to aquatic life.

LIMONENE

Ecotoxicity Very toxic to aquatic life with long lasting effects.

2-PINENE

Ecotoxicity The product contains a substance which is toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

LEVOMENOL

Ecotoxicity Harmful to aquatic life with long lasting effects.

12.1. Toxicity

Toxicity Harmful to aquatic life with long lasting effects.

Ecological information on ingredients.

LINALOOL

Toxicity Not considered toxic to fish.

Acute aquatic toxicity

LAVENDER, LAVANDULA HYBRIDA, EXT

Acute toxicity - fish	LC_{50}, 96 hours: 27.8 mg/l, Fish OECD 203
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 59 mg/l, Daphnia magna
Acute toxicity - aquatic plants	IC_{50}, 72 hours: 156.7 mg/l, Algae

LINALYL ACETATE

Acute aquatic toxicity

Acute toxicity - fish	LC_{50}, 96 hours: 7.9 mg/l, Freshwater fish OECD 203
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 15 mg/l, Daphnia magna OECD 202
Acute toxicity - aquatic plants	IC_{50}, 72 hours: 62 mg/l, Freshwater algae OECD 201

CAMPHOR

Toxicity	Not considered toxic to fish.

Acute aquatic toxicity

Acute toxicity - fish	LC_{50}, 96 hours: ~ 17 mg/l, Pimephales promelas (Fat-head Minnow) LC_{50}, 96 hour: 33.25 mg/l, Fish

EUCALYPTOL

Toxicity	Not considered toxic to fish.

Acute aquatic toxicity

Acute toxicity - fish	LC_{50}, 96 hours: 102 mg/l, Fish

CARYOPHYLLENE

Toxicity	May cause long lasting harmful effects to aquatic life.

DL-BORNEOL

Acute aquatic toxicity

Acute toxicity - fish	Chronic, NOEC, 21 day: 0.011 mg/l, Fish
Acute toxicity - aquatic plants	Chronic, NOEC, 72 hour: 0.011 mg/l, Algae

Chronic aquatic toxicity

Chronic toxicity - aquatic invertebrates	Chronic, NOEC, 21 day: 0.011 mg/l, Daphnia magna

(Z)-3,7-DIMETHYLOCTA-1,3,6,-TRIENE

Acute aquatic toxicity

$LE(C)_{50}$	$0.1 < L(E)C50 \le 1$

LAVENDER, LAVANDULA HYBRIDA, EXT

M factor (Acute) 1

1-METHYL 4-ISO PROPYL-1-CYCLOHEXEN-8-OL

Acute aquatic toxicity

Acute toxicity - fish LC_{50}, 96 hour: 70 mg/l, Fish
OECD 203

Acute toxicity - aquatic invertebrates EC_{50}, 48 hour: 73 mg/l, Daphnia magna
OECD 202

Acute toxicity - aquatic plants EC_{50}, 72 hour: 68 mg/l, Algae
OECD 201
Chronic, NOEC, 72 hour: 3.9 mg/l, Algae
OECD 201

LIMONENE

Toxicity Very toxic to aquatic organisms.

Acute aquatic toxicity

$LE(C)_{50}$ $0.1 < L(E)C50 \le 1$

M factor (Acute) 1

Acute toxicity - fish LC_{50}, 96 hours: 0.702 - 0.720 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic invertebrates EC_{50}, 48 hours: 70 mg/l, Daphnia magna

Acute toxicity - aquatic plants ErC50, 72 hours: 8 mg/l, Algae

Chronic aquatic toxicity

M factor (Chronic) 1

Chronic toxicity - aquatic invertebrates NOEC, 21 days: 0.27 mg/l, Daphnia magna

GERANIOL

Acute aquatic toxicity

Acute toxicity - fish LC_{50}, 96 hour: 14 - 22 mg/l, Fish
OECD 203

Acute toxicity - aquatic invertebrates EC_{50}, 48 hour: 10.8 mg/l, Daphnia magna
OECD 202

Acute toxicity - aquatic plants IC_{50}, 72 hour: 13.1 mg/l, Algae
OECD 201

2-PINENE

Acute aquatic toxicity

$LE(C)_{50}$ $0.1 < L(E)C50 \le 1$

M factor (Acute) 1

LAVENDER, LAVANDULA HYBRIDA, EXT

Acute toxicity - aquatic invertebrates	LC_{50}, 48 hour: 6.74 mg/l, Daphnia magna

Chronic aquatic toxicity

NOEC	0.01 < NOEC ≤ 0.1
Degradability	Non-rapidly degradable
M factor (Chronic)	1

LEVOMENOL

Toxicity	Harmful to aquatic life.

Acute aquatic toxicity

Acute toxicity - fish	LC_{50}, 96 hours: >4.6<10 mg/l, Fish
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 1.3 mg/l, Daphnia magna

12.2. Persistence and degradability

Persistence and degradability There are no data on the degradability of this product.

Ecological information on ingredients.

LINALOOL

Persistence and degradability	The product is readily biodegradable.
Biodegradation	The substance is readily biodegradable. - Degradation (%) 64.2%: 28 days OECD 301D

LINALYL ACETATE

Biodegradation	The substance is readily biodegradable. - Degradation 70 - 80%: 28 days OECD 301F

CAMPHOR

Persistence and degradability	Expected to be readily biodegradable.

EUCALYPTOL

Persistence and degradability	The substance is readily biodegradable.

DL-BORNEOL

Persistence and degradability	The product is readily biodegradable.

1-METHYL 4-ISO PROPYL-1-CYCLOHEXEN-8-OL

LAVENDER, LAVANDULA HYBRIDA, EXT

Persistence and degradability The product is readily biodegradable.

Biodegradation - Degradation 80%: 28 day

LIMONENE

Persistence and degradability The product is not expected to be biodegradable.

GERANIOL

Persistence and degradability The product is readily biodegradable.

Biodegradation - Degradation 90 - 100%: 28 day
OECD 301A
- Degradation 82%: 28 day
OECD 301D

2-PINENE

Persistence and degradability The product is readily biodegradable.

LEVOMENOL

Persistence and degradability The product is biodegradable.

NERYL ACETATE

Persistence and degradability The product is readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient No information available.

Ecological information on ingredients.

LINALOOL

Bioaccumulative potential The product is not bioaccumulating.

Partition coefficient log Kow: 2.7

LINALYL ACETATE

Bioaccumulative potential Bioaccumulation is unlikely.

Partition coefficient log Pow: 3.9

CAMPHOR

Bioaccumulative potential Bioaccumulation is unlikely.

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Partition coefficient log Pow: 3.04

EUCALYPTOL

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient log Pow: 2.97

CARYOPHYLLENE

Bioaccumulative potential Potentially bioaccumulating.

Partition coefficient log Pow: 6.23

1-METHYL 4-ISO PROPYL-1-CYCLOHEXEN-8-OL

Bioaccumulative potential Bioaccumulation is unlikely.

Partition coefficient log Pow: 2.67

LIMONENE

Bioaccumulative potential BCF: 490 - 1460,

Partition coefficient log Pow: 4.59

GERANIOL

Bioaccumulative potential Bioaccumulation is unlikely.

Partition coefficient log Pow: 2.6

LEVOMENOL

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient log Pow: 4.8

NERYL ACETATE

Bioaccumulative potential Bioaccumulation is unlikely.

Partition coefficient log Pow: 3.67

12.4. Mobility in soil

Mobility No information available.

Ecological information on ingredients.

LINALOOL

Mobility The product is insoluble in water.

CAMPHOR

Mobility The product is partly soluble in water and may spread in the aquatic environment.

EUCALYPTOL

LAVENDER, LAVANDULA HYBRIDA, EXT

Mobility The product is insoluble in water.

LIMONENE

Mobility The product is insoluble in water.

2-PINENE

Mobility The product is insoluble in water.

LEVOMENOL

Mobility The product has poor water-solubility.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

Ecological information on ingredients.

LINALOOL

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

CAMPHOR

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

EUCALYPTOL

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

LIMONENE

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

LEVOMENOL

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Other adverse effects None known.

Ecological information on ingredients.

LINALOOL

Other adverse effects Not determined.

CAMPHOR

Other adverse effects No information available.

LAVENDER, LAVANDULA HYBRIDA, EXT

EUCALYPTOL

Other adverse effects None known.

LIMONENE

Other adverse effects No information available.

LEVOMENOL

Other adverse effects Not determined.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Do not puncture or incinerate, even when empty. Empty containers or liners may retain some product residues and hence be potentially hazardous.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant
No.

14.6. Special precautions for user

Not applicable.

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

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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

LAVENDER, LAVANDULA HYBRIDA, EXT

EU legislation	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended). Commission Regulation (EU) No 2015/830 of 28 May 2015.
Restrictions (Annex XVII Regulation 1907/2006)	This product is/contains a substance that is included in REGULATION (EC) No 1907/2006 (REACH) ANNEX XVII - RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES. Entry number: 3

15.2. Chemical safety assessment

A chemical safety assessment has been carried out.

Inventories

EU - EINECS/ELINCS

All the ingredients are listed or exempt.

SECTION 16: Other information

LAVENDER, LAVANDULA HYBRIDA, EXT

Abbreviations and acronyms used in the safety data sheet	ATE: Acute Toxicity Estimate. ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road. ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways. CAS: Chemical Abstracts Service. DNEL: Derived No Effect Level. IATA: International Air Transport Association. IMDG: International Maritime Dangerous Goods. Kow: Octanol-water partition coefficient. LC_{50}: Lethal Concentration to 50 % of a test population. LD_{50}: Lethal Dose to 50% of a test population (Median Lethal Dose). PBT: Persistent, Bioaccumulative and Toxic substance. PNEC: Predicted No Effect Concentration. REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006. RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail. vPvB: Very Persistent and Very Bioaccumulative. IARC: International Agency for Research on Cancer. MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. cATpE: Converted Acute Toxicity Point Estimate. BCF: Bioconcentration Factor. BOD: Biochemical Oxygen Demand. EC_{50}: 50% of maximal Effective Concentration. LOAEC: Lowest Observed Adverse Effect Concentration. LOAEL: Lowest Observed Adverse Effect Level. NOAEC: No Observed Adverse Effect Concentration. NOAEL: No Observed Adverse Effect Level. NOEC: No Observed Effect Concentration. LOEC: Lowest Observed Effect Concentration. DMEL: Derived Minimal Effect Level. EL50: Exposure Limit 50 hPa: Hectopascal LL50: Lethal Loading fifty OECD: Organisation for Economic Co-operation and Development POW: Octanol-water partition coefficient SCBA: self-contained breathing apparatus STP: Sewage Treatment Plant VOC: Volatile Organic Compounds
Classification abbreviations and acronyms	Acute Tox. = Acute toxicity Aquatic Acute = Hazardous to the aquatic environment (acute) Aquatic Chronic = Hazardous to the aquatic environment (chronic)
Key literature references and sources for data	Supplier's information.
Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	06/01/2021
Version number	2.001
Supersedes date	09/12/2020
SDS number	55419

LAVENDER, LAVANDULA HYBRIDA, EXT

SDS status	Approved.
Hazard statements in full	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. H332 Harmful if inhaled. H371 May cause damage to organs if inhaled. H371 May cause damage to organs (Lungs) if inhaled. 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. H413 May cause long lasting harmful effects to aquatic life.
Signature	Jitendra Panchal