LILY OF THE VALLEY #EU29464F

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 6/13/2018 Revision date: 4/2/2024 Supersedes version of: 8/15/2022 Version: 2.1

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

1.1. Product identifier

Product form	:	Mixture
Trade name	:	LILY OF THE VALLEY #EU29464F
UFI	:	529C-J2W0-8003-F7C8
Product code	:	EU26464F
Type of product	:	Perfumes, fragrances
Product group	:	Trade product

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

1.2.1. Relevant identified uses

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

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

FRENCH COLOR & FRAGRANCE International GmbH
Mittlerer Weg 35
DE 79424 Auggen
Germany
T 49-7631-931-8900
SDS@frenchcolor.com, www.frenchcolor.com

1.4. Emergency telephone number

Emergency number	:	1-800-255-3924; +01-813-248-0585; China:+400-120-0751; Mexico:+01-800-099-0731; Brazil: +0-800-591-6042; India: +000-800-100-4086

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

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

Suspected of damaging fertility or the unborn child. Causes skin irritation. Causes serious eye irritation. Harmful to aquatic life with long lasting effects. May cause an allergic skin reaction.

2.2. Label elements

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

Hazard pictograms (CLP) :

GHS07

Signal word (CLP) : Warning

Contains	:	Hexyl salicylate; Hexyl cinnamic aldehyde; Citronellol Pure; Linalool; L-Carvone; Benzyl salicylate; Spearmint oil; Artemesia vulgaris oil (Armoise); Peppermint oil america; Anise oil (Spanish); Heliotropine; Linalyl acetate; Amyl cinnamic aldehyde; Eugenol; Floralozone
Hazard statements (CLP)	:	H317 - May cause an allergic skin reaction. H319 - Causes serious eye irritation. H412 - Harmful 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. 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.
Extra phrases	:	For professional users only.

2.3. Other hazards

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

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]
tetrahydro-2-isobutyl-4-methylpyran-4-ol, mixed isomers (cis and trans)	CAS-No.: 63500-71-0 EC-No.: 405-040-6 EC Index-No.: 603-101-00-3 REACH-no: 01-000015458-64	2 – 8	Eye Irrit. 2, H319
Phenylethyl alcohol	CAS-No.: 60-12-8 EC-No.: 200-456-2 REACH-no: 01-2119963921-31	3.6 – 7.25	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319
Hexyl cinnamic aldehyde	CAS-No.: 101-86-0 EC-No.: 202-983-3 REACH-no: 01-2119533092-50	3.4 – 6.7	Skin Sens. 1, H317 Aquatic Chronic 2, H411
Citronellol Pure	CAS-No.: 106-22-9 EC-No.: 203-375-0 REACH-no: 01-2119453995-23	2 – 4	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317
Benzyl acetate substance with national workplace exposure limit(s) (BE, DK, ES, IE, LT, LV, PT, RO)	CAS-No.: 140-11-4 EC-No.: 205-399-7 REACH-no: 01-2119638272-42	1.3 – 2.6	Aquatic Chronic 3, H412
Linalool	CAS-No.: 78-70-6 EC-No.: 201-134-4 EC Index-No.: 603-235-00-2 REACH-no: 01-2119474016-42	1 – 2	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
L-Carvone	CAS-No.: 6485-40-1 EC-No.: 229-352-5 EC Index-No.: 606-148-00-8	0.7 – 1.35	Skin Sens. 1B, H317
Benzyl salicylate	CAS-No.: 118-58-1 EC-No.: 204-262-9 EC Index-No.: 607-754-00-5 REACH-no: 01-2119969442-31	0.5 – 1.05	Eye Irrit. 2, H319 Skin Sens. 1B, H317 Aquatic Chronic 3, H412
Spearmint oil	CAS-No.: 8008-79-5 EC-No.: 616-927-4	0.5 – 1	Flam. Liq. 3, H226 Asp. Tox. 1, H304 Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 2, H411
Artemesia vulgaris oil (Armoise)	CAS-No.: 68991-20-8 EC-No.: 283-874-8	0.5 – 1	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Skin Sens. 1, H317 STOT SE 2, H371 Asp. Tox. 1, H304 Aquatic Chronic 3, H412 Eye Irrit. 2, H319
Hexyl salicylate	CAS-No.: 6259-76-3 EC-No.: 228-408-6	0.04 – 0.8	Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Peppermint oil america	CAS-No.: 8006-90-4 EC-No.: 282-015-4;616-900-7 REACH-no: 01-2119974601-36	0.3 – 0.65	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 3, H412
Anise oil (Spanish)	CAS-No.: 8007-70-3 EC-No.: 616-914-3	0.3 – 0.55	Skin Sens. 1, H317 Muta. 2, H341 Carc. 2, H351 Aquatic Chronic 3, H412
Heliotropine	CAS-No.: 120-57-0 EC-No.: 204-409-7 REACH-no: 01-2119983608-21	0.2 – 0.35	Skin Sens. 1B, H317
Linalyl acetate	CAS-No.: 115-95-7 EC-No.: 204-116-4 REACH-no: 01-2119454789-19	0.2 – 0.35	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317
Amyl cinnamic aldehyde	CAS-No.: 122-40-7 EC-No.: 204-541-5	0.1 – 0.25	Skin Sens. 1B, H317 Aquatic Chronic 2, H411
Eugenol	CAS-No.: 97-53-0 EC-No.: 202-589-1 REACH-no: 01-2119971802-33	0.1 – 0.25	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Skin Sens. 1B, H317
Floralozone	CAS-No.: 67634-15-5 EC-No.: 266-819-2 REACH-no: 01-2120758796-34	0.1 – 0.15	Aquatic Acute 1, H400 Aquatic Chronic 2, H411 Skin Irrit. 2, H315 Skin Sens. 1B, H317

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 : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). IF exposed or concerned: Get medical advice/attention.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Allow affected person to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. If skin irritation or rash occurs: Get medical advice/attention. Specific treatment (see Get medical advice/attention. on this label). If skin irritation occurs: Get medical advice/attention. 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 immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists. 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 : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.

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

Symptoms/effects after eye contact : Eye irritation.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Sand. 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

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

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. 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

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Evacuate unnecessary personnel. 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. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials. Notify authorities if product enters sewers or public waters.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

See Section 8. Exposure controls and personal protection. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. 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. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Contaminated work clothing should not be allowed out of the workplace.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container closed when not in use. Store locked up. Store in a well-ventilated place. Keep cool.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight.

Storage temperature : 25 °C

Storage area : Store in a well-ventilated place. Store away from heat.

Special rules on packaging : Store in a closed container.

Packaging materials : Do not store in corrodable metal.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Benzyl acetate (140-11-4)	
Belgium - Occupational Exposure Limits	
OEL TWA	62 mg/m³
	10 ppm
Denmark - Occupational Exposure Limits	
OEL TWA	61 mg/m³
	10 ppm
OEL STEL	122 mg/m³

Benzyl acetate (140-11-4)	
	20 ppm
Ireland - Occupational Exposure Limits	
OEL TWA	10 ppm
OEL STEL	30 ppm (calculated)
Latvia - Occupational Exposure Limits	
OEL TWA	5 mg/m³
Lithuania - Occupational Exposure Limits	
IPRV (OEL TWA)	5 mg/m³
Portugal - Occupational Exposure Limits	
OEL TWA	10 ppm
OEL chemical category	A4 - Not Classifiable as a Human Carcinogen
Romania - Occupational Exposure Limits	
OEL TWA	50 mg/m³
	8 ppm
OEL STEL	80 mg/m³
	13 ppm
Spain - Occupational Exposure Limits	
VLA-ED (OEL TWA)	62 mg/m³
	10 ppm
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	10 ppm
ACGIH chemical category	Not Classifiable as a Human Carcinogen

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:
Avoid all unnecessary exposure.

Personal protective equipment symbol(s):

8.2.2.1. Eye and face protection

Eye protection:
Chemical goggles or safety glasses. Safety glasses

8.2.2.2. Skin protection

Skin and body protection:
Wear suitable protective clothing

Hand protection:
Wear protective gloves.

8.2.2.3. Respiratory protection

Respiratory protection:
Wear appropriate mask. [In case of inadequate ventilation] wear respiratory protection.

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:
Avoid release to the environment.

Other information:
Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	light yellow. amber. Conforms to standard.
Odour	:	characteristic. characteristic.
Odour threshold	:	Not available
Melting point	:	Not applicable
Freezing point	:	Not available
Boiling point	:	Not available
Flammability	:	Not applicable
Lower explosion limit	:	Not available
Upper explosion limit	:	Not available
Flash point	:	> 93.3 °C
Auto-ignition temperature	:	Not available
Decomposition temperature	:	Not available
pH	:	Not available
Viscosity, kinematic	:	Not available
Solubility	:	Not available
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Vapour pressure	:	0.002794956 mm Hg (calculated value)
Vapour pressure at 50°C	:	Not available
Density	:	Not available
Relative density	:	≈ 0.94
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

VOC content : 14.064 % (calculated value)(CARB VOC) (%w/w)

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

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

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

Hexyl salicylate (6259-76-3)	
LD50 oral rat	> 5 g/kg (Source: NLM_CIP)
LD50 dermal rabbit	> 5000 mg/kg (Source: ECHA_API)

tetrahydro-2-isobutyl-4-methylpyran-4-ol, mixed isomers (cis and trans) (63500-71-0)	
LD50 dermal rabbit	> 2000 mg/kg (Source: ECHA_API)

Phenylethyl alcohol (60-12-8)	
LD50 oral rat	1609 mg/kg (Source: EPA_HPV)
LD50 oral	1610 mg/kg bodyweight
LD50 dermal rabbit	2535 mg/kg (Source: EPA_HPV)
LD50 dermal	2500 mg/kg bodyweight
LC50 Inhalation - Rat	> 4.63 mg/l/4h

Hexyl cinnamic aldehyde (101-86-0)	
LD50 oral rat	3100 mg/kg (Source: NLM_CIP)
LD50 oral	3100 mg/kg bodyweight

Hexyl cinnamic aldehyde (101-86-0)	
LD50 dermal rabbit	> 3000 mg/kg (Source: EPA_HPV)
LC50 Inhalation - Rat	> 5 mg/l/4h

Citronellol Pure (106-22-9)	
LD50 oral rat	3450 mg/kg (Source: NLM_CIP)
LD50 oral	3450 mg/kg bodyweight
LD50 dermal rabbit	2650 mg/kg (Source: EPA_HPV)
LD50 dermal	2650 mg/kg bodyweight

Benzyl acetate (140-11-4)	
LD50 oral rat	2490 mg/kg (Source: JAPAN_GHS)
LD50 oral	2490 mg/kg bodyweight
LD50 dermal rabbit	> 5000 mg/kg (Source: JAPAN_GHS)

Linalool (78-70-6)	
LD50 oral	2790 mg/kg bodyweight

L-Carvone (6485-40-1)	
LD50 oral rat	5400 mg/kg (Source: KR_NIER)
LD50 oral	2500 mg/kg bodyweight
LD50 dermal rat	> 2000 mg/kg (Source: ECHA_API)
LD50 dermal	3800 mg/kg bodyweight

Benzyl salicylate (118-58-1)	
LD50 oral rat	2227 mg/kg (Source: NLM_CIP)
LD50 oral	2200 mg/kg bodyweight
LD50 dermal rabbit	> 5000 mg/kg (Source: CHEMVIEW)

Spearmint oil (8008-79-5)	
LD50 oral rat	5 g/kg (Source: NLM_CIP)
LD50 oral	4900 mg/kg

Artemesia vulgaris oil (Armoise) (68991-20-8)	
LD50 oral	747 mg/kg bodyweight

Peppermint oil america (8006-90-4)	
LD50 oral rat	2426 mg/kg (Source: NZ_CCID)

Anise oil (Spanish) (8007-70-3)	
LD50 oral rat	2250 mg/kg (Source: NLM_CIP)
LD50 oral	2200 mg/kg

Heliotropine (120-57-0)	
LD50 oral rat	2700 mg/kg (Source: NLM_CIP)
LD50 oral	2700 mg/kg bodyweight
LD50 dermal rat	> 5000 mg/kg (Source: ECHA_API)

Linalyl acetate (115-95-7)	
LD50 oral rat	14550 mg/kg (Source: EPA_HPV)
LD50 dermal rabbit	> 5000 mg/kg (Source: ECHA)
LC50 Inhalation - Rat	> 18.94 mg/l (Exposure time: 8 h Source: ECHA)

Amyl cinnamic aldehyde (122-40-7)	
LD50 oral rat	3730 mg/kg (Source: CHEMVIEW)
LD50 dermal rabbit	> 2000 mg/kg (Source: CHEMVIEW)

Eugenol (97-53-0)	
LD50 oral rat	1930 mg/kg (Source: NZ_CCID)
LD50 oral	2500 mg/kg bodyweight

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

Benzyl acetate (140-11-4)	
IARC group	3 - Not classifiable

Eugenol (97-53-0)	
IARC group	3 - Not classifiable

Reproductive toxicity : Not classified
STOT-single exposure : Not classified

Artemesia vulgaris oil (Armoise) (68991-20-8)	
STOT-single exposure	May cause damage to organs.

STOT-repeated exposure : Not classified
Aspiration hazard : Not classified

Heliotropine (120-57-0)	
Viscosity, kinematic	Not applicable

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

No additional information available

11.2.2. Other information

Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met

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.

Phenylethyl alcohol (60-12-8)	
EC50 - Crustacea [1]	287.17 mg/l (Exposure time: 48 h - Species: Daphnia magna)

Phenylethyl alcohol (60-12-8)	
EC50 72h - Algae [1]	490 mg/l (Species: Desmodesmus subspicatus)

Linalool (78-70-6)	
EC50 96h - Algae [1]	88.3 mg/l (Species: Desmodesmus subspicatus)

L-Carvone (6485-40-1)	
LC50 - Fish [1]	6.1 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [semi-static] Source: ECHA)

Benzyl salicylate (118-58-1)	
LC50 - Fish [1]	1.03 mg/l (Exposure time: 96 h - Species: Danio rerio [semi-static] Source: ECHA)

Heliotropine (120-57-0)	
LC50 - Fish [1]	2.5 mg/l (Exposure time: 96 h - Species: Cyprinus carpio [static] Source: ECHA)

Linalyl acetate (115-95-7)	
LC50 - Fish [1]	11 mg/l (Exposure time: 96 h - Species: Cyprinus carpio [flow-through] Source: ECHA)

Eugenol (97-53-0)	
LC50 - Fish [1]	13 mg/l (Exposure time: 96 h - Species: Danio rerio [semi-static] Source: ECHA)

12.2. Persistence and degradability

LILY OF THE VALLEY #EU29464F	
Persistence and degradability	Not established.

Hexyl salicylate (6259-76-3)	
Persistence and degradability	Rapidly degradable

tetrahydro-2-isobutyl-4-methylpyran-4-ol, mixed isomers (cis and trans) (63500-71-0)	
Persistence and degradability	Rapidly degradable

Phenylethyl alcohol (60-12-8)	
Persistence and degradability	Rapidly degradable

Hexyl cinnamic aldehyde (101-86-0)	
Persistence and degradability	Rapidly degradable

Citronellol Pure (106-22-9)	
Persistence and degradability	Rapidly degradable

Benzyl acetate (140-11-4)	
Persistence and degradability	Rapidly degradable

Linalool (78-70-6)	
Persistence and degradability	Rapidly degradable

L-Carvone (6485-40-1)	
Persistence and degradability	Rapidly degradable

Benzyl salicylate (118-58-1)	
Persistence and degradability	Rapidly degradable

Spearmint oil (8008-79-5)	
Persistence and degradability	Rapidly degradable

Artemesia vulgaris oil (Armoise) (68991-20-8)	
Persistence and degradability	Rapidly degradable

Peppermint oil america (8006-90-4)	
Persistence and degradability	Rapidly degradable

Anise oil (Spanish) (8007-70-3)	
Persistence and degradability	Rapidly degradable

Heliotropine (120-57-0)	
Persistence and degradability	Rapidly degradable

Linalyl acetate (115-95-7)	
Persistence and degradability	Rapidly degradable

Amyl cinnamic aldehyde (122-40-7)	
Persistence and degradability	Rapidly degradable

Eugenol (97-53-0)	
Persistence and degradability	Rapidly degradable

Floralozone (67634-15-5)	
Persistence and degradability	Rapidly degradable

12.3. Bioaccumulative potential

LILY OF THE VALLEY #EU29464F	
Bioaccumulative potential	Not established.

Hexyl salicylate (6259-76-3)	
Partition coefficient n-octanol/water (Log Pow)	5.5 (at 30 °C (at pH 7)

tetrahydro-2-isobutyl-4-methylpyran-4-ol, mixed isomers (cis and trans) (63500-71-0)	
Partition coefficient n-octanol/water (Log Pow)	1.65 (at 23 °C (at pH >6.09-<6.74)

Phenylethyl alcohol (60-12-8)	
Partition coefficient n-octanol/water (Log Pow)	1.36 (at 20 °C (at pH 7)

Citronellol Pure (106-22-9)	
Partition coefficient n-octanol/water (Log Pow)	3.41 (at 25 °C)

Benzyl acetate (140-11-4)	
Partition coefficient n-octanol/water (Log Pow)	1.96 (at 25 °C (at pH 7)

L-Carvone (6485-40-1)	
Partition coefficient n-octanol/water (Log Pow)	2.74 (at 37 °C (at pH 7.2)

Benzyl salicylate (118-58-1)	
Partition coefficient n-octanol/water (Log Pow)	4

Heliotropine (120-57-0)	
Partition coefficient n-octanol/water (Log Pow)	1.2 (at 35 °C)

Linalyl acetate (115-95-7)	
Partition coefficient n-octanol/water (Log Pow)	3.9 (at 25 °C)

Amyl cinnamic aldehyde (122-40-7)	
Partition coefficient n-octanol/water (Log Pow)	2.498 (at 25 °C (at pH 6.2)

Eugenol (97-53-0)	
Partition coefficient n-octanol/water (Log Pow)	1.83 (at 30 °C (at pH 5.5)

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

Additional information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Ecological information : Avoid release to the environment.
HP Code : HP4 - "Irritant – skin irritation and eye damage:" waste which on application can cause skin irritation or damage to the eye.
HP14 - "Ecotoxic:" waste which presents or may present immediate or delayed risks for one or more sectors of the environment

SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

ADR	IMDG	IATA	ADN	RID
No supplementary information available				

14.6. Special precautions for user

Overland transport
Not applicable

Transport by sea
Not applicable

Air transport
Not applicable

Inland waterway transport
Not applicable

Rail transport
Not applicable

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**	**Entry title or description**
3(a)	Spearmint oil ; Artemesia vulgaris oil (Armoise)	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F
3(b)	LILY OF THE VALLEY #EU29464F ; Hexyl salicylate ; tetrahydro-2-isobutyl-4-methylpyran-4-ol, mixed isomers (cis and trans) ; Phenylethyl alcohol ; Hexyl cinnamic aldehyde ; Citronellol Pure ; Linalool ; L-Carvone ; Benzyl salicylate ; Spearmint oil ; Artemesia vulgaris oil (Armoise) ; Peppermint oil america ; Anise oil (Spanish) ; Linalyl acetate ; Amyl cinnamic aldehyde ; Eugenol ; Floralozone	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10

EU restriction list (REACH Annex XVII)		
Reference code	**Applicable on**	**Entry title or description**
3(c)	LILY OF THE VALLEY #EU29464F ; Hexyl salicylate ; Hexyl cinnamic aldehyde ; Benzyl acetate ; Benzyl salicylate ; Spearmint oil ; Artemesia vulgaris oil (Armoise) ; Peppermint oil america ; Anise oil (Spanish) ; Amyl cinnamic aldehyde ; Floralozone	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1
40.	Spearmint oil ; Artemesia vulgaris oil (Armoise)	Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.

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.

VOC Directive (2004/42)

VOC content : 14.064 % (calculated value)(CARB VOC) (%w/w)

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)

Drug Precursors Regulation (273/2004)

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

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

15.1.2. National regulations

Germany

Employment restrictions : Observe restrictions according Act on the Protection of Working Mothers (MuSchG). Observe restrictions according Act on the Protection of Young People in Employment (JArbSchG).

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

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

Netherlands

ABM category	:	A(3) - hazardous for aquatic organisms, may have longterm hazardous effects in aquatic environment
SZW-lijst van kankerverwekkende stoffen	:	Artemesia vulgaris oil (Armoise),Floralozone are listed
SZW-lijst van mutagene stoffen	:	Artemesia vulgaris oil (Armoise),Floralozone are listed
SZW-lijst van reprotoxische stoffen – Borstvoeding	:	None of the components are listed
SZW-lijst van reprotoxische stoffen – Vruchtbaarheid	:	None of the components are listed
SZW-lijst van reprotoxische stoffen – Ontwikkeling	:	None of the components are listed

Denmark

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

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Other information	:	None.

Full text of H- and EUH-statements:	
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
Carc. 2	Carcinogenicity, Category 2
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H341	Suspected of causing genetic defects.
H351	Suspected of causing cancer.
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.
Muta. 2	Germ cell mutagenicity, Category 2

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

The classification complies with : ATP 12

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.