SAFETY DATA SHEET (SDS)

Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) 2020/878 and GHS.Version:14.1

Litsea Cubeba Essential Oil

SECTION 01: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Description	Details
Product name:	Litsea Cubeba Essential Oil
EC No (EC/EINECS/ELINCS):	943-438-6
CAS:	68855-99-2
REACH registration No.:	01-2120118332-70
Product code:	020264

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

Relevant identified uses

Main use category: Industrial use
Use of the substance/mixture: Flavor ingredient
Fragrance ingredient

1.3. Supplier

Aromology Trading LLC
G05 Al Ghazal Building
Nadd Al Hamar
Dubai, United Arab Emirates

Website: www.aromology.com
Email: info@aromology.com
Telephone: +971 505197601

SECTION 02: Hazards identification

2.1. Classification of the substance or mixture

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

Classification	Code
Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 2	H319
Skin sensitisation, Category 1	H317
Aspiration hazard, Category 1	H304
Hazardous to the aquatic environment – Chronic Hazard, Category 2	H411

Adverse physicochemical, human health and environmental effects
Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May be fatal if swallowed and enters airways. Toxic to aquatic life with long lasting effects.

2.2. Label elements

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

Hazard pictograms (CLP): GHS07, GHS08, GHS09
Signal word (CLP): Danger

Hazard statements (CLP)

Code	Statement
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.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements (CLP)

Code	Statement
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.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor.

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

SECTION 03: Composition/information on ingredients

3.1. Substances

Description	Details
Substance type	UVCB
Name	Essential oil of Litsea, Litsea cubeba (Lauraceae) obtained from the fruits by distillation
CAS	68855-99-2
EC No (EC/EINECS/ELINCS)	943-438-6

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
citral	CAS: 5392-40-5; EC No (EC/EINECS/ELINCS): 226-394-6; EC index number: 605-019-00-3	70 – 80	Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317
Limonene	CAS: 5989-27-5/138-86-3/5989-54-8; EC No (EC/EINECS/ELINCS): 227-813-5; EC index number: 601-096-00-2	10 – 20	Flam. Liq. 3, H226; Skin Irrit. 2, H315; Skin Sens. 1B, H317; Asp. Tox. 1, H304; Aquatic Acute 1, H400; Aquatic Chronic 3, H412
6-Methyl-5-hepten-2-one	CAS: 110-93-0; EC No (EC/EINECS/ELINCS): 203-816-7	1 – 5	Flam. Liq. 3, H226
Linalool	CAS: 78-70-6; EC No (EC/EINECS/ELINCS): 201-134-4; EC index number: 603-235-00-2	1 – 5	Eye Irrit. 2, H319; Skin Irrit. 2, H315; Skin Sens. 1B, H317
beta-Caryophyllene	CAS: 87-44-5; EC No (EC/EINECS/ELINCS): 201-746-1	1 – 5	Asp. Tox. 1, H304; Skin Sens. 1B, H317
Myrcene	CAS: 123-35-3; EC No (EC/EINECS/ELINCS): 204-622-5	1 – 5	Flam. Liq. 3, H226; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Asp. Tox. 1, H304; Aquatic Acute 1, H400; Aquatic Chronic 2, H411
beta-Pinene	CAS: 127-91-3; EC No (EC/EINECS/ELINCS): 204-872-5	1 – 5	Flam. Liq. 3, H226; Skin Irrit. 2, H315; Skin Sens. 1B, H317; Asp. Tox. 1, H304; Aquatic Acute 1, H400; Aquatic Chronic 1, H410
alpha-Pinene	CAS: 80-56-8; EC No (EC/EINECS/ELINCS): 201-291-9	1 – 5	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight); Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Asp. Tox. 1, H304; Flam. Liq. 3, H226; Skin Irrit. 2, H315; Skin Sens. 1B, H317
Eucalyptol	CAS: 470-82-6; EC No (EC/EINECS/ELINCS): 207-431-5	1 – 5	Flam. Liq. 3, H226; Skin Sens. 1B, H317; Eye Irrit. 2, H319
Citronellal	CAS: 106-23-0; EC No (EC/EINECS/ELINCS): 203-376-6	1 – 5	Eye Irrit. 2, H319; Skin Irrit. 2, H315; Skin Sens. 1B, H317
dl-Citronellol	CAS: 106-22-9; EC No (EC/EINECS/ELINCS): 203-375-0	1 – 5	Skin Sens. 1B, H317; Skin Irrit. 2, H315; Eye Irrit. 2, H319
Geraniol	CAS: 106-24-1; EC No (EC/EINECS/ELINCS): 203-377-1; EC index number: 603-241-00-5	1 – 5	Skin Irrit. 2, H315; Eye Dam. 1, H318; Skin Sens. 1, H317
Nerol	CAS: 106-25-2; EC No (EC/EINECS/ELINCS): 203-378-7	1 – 5	Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1B, H317
beta-Phellandrene	CAS: 555-10-2; EC No (EC/EINECS/ELINCS): 209-081-9	0.1 – 1	Asp. Tox. 1, H304; Flam. Liq. 3, H226; Skin Sens. 1, H317
Geranyl acetate	CAS: 105-87-3; EC No (EC/EINECS/ELINCS): 203-341-5	0.1 – 1	Skin Sens. 1B, H317; Skin Irrit. 2, H315; Aquatic Chronic 3, H412
Camphene	CAS: 79-92-5; EC No (EC/EINECS/ELINCS): 201-234-8	0.1 – 1	Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Eye Irrit. 2, H319; Flam. Sol. 2, H228

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Caryophyllene oxide	CAS: 1139-30-6; EC No (EC/EINECS/ELINCS): 214-519-7	0.1 – 1	Aquatic Chronic 2, H411
7-Methyl-3-methyleneoct-6-enal	CAS: 55050-40-3; EC No (EC/EINECS/ELINCS): 259-457-1	0.1 – 1	Skin Sens. 1B, H317; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Aquatic Chronic 3, H412
Isocitral #1	CAS: 72203-97-5	0.1 – 1	Skin Sens. 1B, H317; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Aquatic Chronic 3, H412
alpha-Terpineol	CAS: 98-55-5; EC No (EC/EINECS/ELINCS): 202-680-6	0.1 – 1	Skin Irrit. 2, H315; Eye Irrit. 2, H319
Eugenol	CAS: 97-53-0; EC No (EC/EINECS/ELINCS): 202-589-1	0.1 – 1	Eye Irrit. 2, H319; Skin Sens. 1B, H317
Geranic acid	CAS: 459-80-3; EC No (EC/EINECS/ELINCS): 207-299-9	0.1 – 1	Acute Tox. 4 (Dermal), H312 (ATE=1100 mg/kg bodyweight)
Methyl salicylate	CAS: 119-36-8; EC No (EC/EINECS/ELINCS): 204-317-7; EC index number: 607-749-00-8	0.1 – 1	Repr. 2, H361; Acute Tox. 4 (Oral), H302 (ATE=890 mg/kg bodyweight); Eye Dam. 1, H318; Skin Sens. 1B, H317; Aquatic Chronic 3, H412
Citronellyl propionate	CAS: 141-14-0; EC No (EC/EINECS/ELINCS): 205-461-3	0.1 – 1	Skin Sens. 1B, H317; Aquatic Chronic 2, H411
p-Mentha-1,4-diene	CAS: 99-85-4; EC No (EC/EINECS/ELINCS): 202-794-6	0.1 – 1	Repr. 2, H361; Flam. Liq. 3, H226; Asp. Tox. 1, H304; Aquatic Chronic 2, H411
p-Cymene	CAS: 99-87-6; EC No (EC/EINECS/ELINCS): 202-796-7; EC index number: 601-094-00-1	0.1 – 1	Repr. 2, H361; Flam. Liq. 3, H226; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; Acute Tox. 3 (Inhalation), H331 (ATE=3 mg/l)
4-Carvomenthenol	CAS: 562-74-3; EC No (EC/EINECS/ELINCS): 209-235-5	0.1 – 1	Acute Tox. 4 (Inhalation), H332 (ATE=1.5 mg/l/4h); Acute Tox. 4 (Oral), H302; Eye Irrit. 2, H319; Skin Irrit. 2, H315; Skin Sens. 1, H317; STOT SE 3, H336
Terpinolene	CAS: 586-62-9; EC No (EC/EINECS/ELINCS): 209-578-0	0.1 – 1	Skin Sens. 1B, H317; Asp. Tox. 1, H304; Aquatic Acute 1, H400; Aquatic Chronic 1, H410
p-Mentha-1,3-diene	CAS: 99-86-5; EC No (EC/EINECS/ELINCS): 202-795-1; EC index number: 601-095-00-7	< 0.1	Flam. Liq. 3, H226; Acute Tox. 4 (Oral), H302 (ATE=1680 mg/kg bodyweight); Asp. Tox. 1, H304; Aquatic Chronic 2, H411; Skin Sens. 1, H317; Eye Irrit. 2, H319

SECTION 04: First aid measures

4.1. Description of first aid measures

First-aid measures general: Call a physician immediately. Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

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: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention. Wash with plenty of water/.... Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention. Specific treatment (see supplemental first aid instruction on this label). If skin irritation or rash occurs:

First-aid measures after eye contact: Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion: Do not induce vomiting. Call a physician immediately. Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor.

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

Symptoms/effects after inhalation: May cause an allergic skin reaction.
Symptoms/effects after skin contact: Irritation. May cause an allergic skin reaction. Causes skin irritation.
Symptoms/effects after eye contact: Eye irritation. Causes serious eye irritation.
Symptoms/effects after ingestion: Risk of lung oedema. May be fatal if swallowed and enters airways.

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

Treat symptomatically.

SECTION 05: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Fire extinguishing agents: no data available. Foam. Dry powder. Carbon dioxide. Water spray. Sand.

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 attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 06: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Emergency procedures: Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray. Evacuate unnecessary personnel.

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". Equip cleanup crew with proper protection.

Emergency procedures: Stop release. Ventilate area.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

For containment: Collect spillage.

Methods for cleaning up: Take up liquid spill into absorbent material. Collect spills and put it into appropriated container. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

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. See Section 8. Exposure controls and personal protection.

SECTION 07: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling: Ensure good ventilation of the work station. Obtain special instructions before use. Avoid contact with skin and eyes. Wear personal protective equipment. 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. Avoid breathing dust/fume/gas/mist/vapours/spray.

Hygiene measures: Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Wash hands, forearms and face thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures: Comply with applicable regulations.

Storage conditions: Store locked up. Store in a well-ventilated place. Keep cool. Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use.

Incompatible products: Strong bases. Strong acids.
Incompatible materials: Sources of ignition. Direct sunlight.
Maximum storage period: 12 months
Storage temperature: ≤ 25 °C

Storage area: Store in a well-ventilated place.
Special rules on packaging: Keep in the dark. Store tightly closed in a dry, cool and well-ventilated place. Product must only be kept in the original packaging.

7.3. Specific end use(s)
No additional information available

SECTION 08: Exposure controls/personal protection

8.1. Control parameters

National occupational exposure and biological limit values

citral (5392-40-5)
USA - ACGIH - Occupational Exposure Limits

Description	Details
Local name	Citral
ACGIH® TLV® TWA	32 mg/m³ (IFV - Inhalable fraction and vapor); 5 ppm (IFV - Inhalable fraction and vapor)
Remark (ACGIH)	TLV® Basis: Body weight; URT irr; Eye dam. Notations: Skin; DSEN; A4 (Not classifiable as a Human Carcinogen)
Regulatory reference	ACGIH 2025

8.2. Exposure controls

Appropriate engineering controls
Appropriate engineering controls: Ensure good ventilation of the work station.

Personal protection equipment
Personal protective equipment: Avoid all unnecessary exposure.
Personal protective equipment symbol(s): [See pictograms in the supplier PDF.]

Eye and face protection
Eye protection: Safety glasses. Chemical goggles or safety glasses

Skin protection
Skin and body protection: Wear suitable protective clothing
Hand protection: Protective gloves. Wear protective gloves.

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

Environmental exposure controls
Environmental exposure controls: Avoid release to the environment.
Other information: Do not eat, drink or smoke during use.

SECTION 09: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Description	Details
Physical state	Liquid
Colour	Pale yellow to dark yellow.
Appearance	Liquid.
Odour	Caracteristic, fresh, like citral and verbena.
Odour threshold	Not available
Melting point	Not applicable
Freezing point	Not available
Boiling point	83 °C
Flammability	Not applicable,Non flammable.
Lower explosion limit	Not available
Upper explosion limit	Not available
Flash point (closed cup)	65 °C
Auto-ignition temperature	265 °C (from 994.4 to 1004.0 hPa)
Decomposition temperature	Not available
pH	Not available
Viscosity, kinematic	< 20.5 mm²/s
Solubility	Water: 0.5 – 4364 mg/l (25°C)
Partition coefficient n-octanol/water (Log Kow)	2.06 – 6.3
Vapour pressure	60.29 Pa (25°C)
Vapour pressure at 50°C	Not available
Density	Not available
Specific gravity (20°C)	0.8800 – 0.8920
Relative vapour density at 20°C	Not available
Particle characteristics	Not applicable

Component	Property	Result
citral (5392-40-5)	Boiling point	≈ 230 °C Atm. press.: 1013 hPa Decomposition: 'yes' Decomp. temp.: 180 °C
	Flash point (closed cup)	98 °C
	Auto-ignition temperature	225 °C Source: ECHA
	Vapour pressure	4.6 Pa at 20°C Source: ECHA
Limonene (5989-27-5/138-86-3/5989-54-8)	Boiling point	175.5 – 176 °C at 763 mmHg Source: HSDB
	Flash point (closed cup)	51 °C
	Auto-ignition temperature	245 °C Source: ECHA Registered substances
	Vapour pressure	1.98 mm Hg
6-Methyl-5-hepten-2-one (110-93-0)	Boiling point	172 °C Source: IUCLID

Component	Property	Result
	Flash point (closed cup)	55 °C
	Vapour pressure	100 Pa Source: IUCLID
Linalool (78-70-6)	Boiling point	196.3 °C Atm. press.: 99,2 kPa Decomposition: 'no' Decomp. temp.: 196,3 °C
	Flash point (closed cup)	77 °C
	Auto-ignition temperature	235 °C Source: International Chemical Safety Cards
	Vapour pressure	27 Pa Temp.: 298 K
beta-Caryophyllene (87-44-5)	Boiling point	253 – 262 °C Atm. press.: 1013 hPa
	Flash point (closed cup)	105.5 °C
	Vapour pressure	6 Pa
Myrcene (123-35-3)	Boiling point	167 °C
	Flash point (closed cup)	45 °C
	Vapour pressure	267.98 Pa Temp.: 25 °C
beta-Pinene (127-91-3)	Boiling point	158 – 166 °C
	Flash point (closed cup)	39 °C
	Auto-ignition temperature	255 °C
	Vapour pressure	2.93 mm Hg
alpha-Pinene (80-56-8)	Boiling point	155.95 °C Atm. press.: 1013,25 mBar
	Flash point (closed cup)	31 °C
	Auto-ignition temperature	255 °C
	Vapour pressure	4.75 mm Hg
Eucalyptol (470-82-6)	Boiling point	177 °C Atm. press.: 101,325 kPa Decomposition: 'no'
	Flash point (closed cup)	52 °C
	Vapour pressure	122 Pa Temp.: 20 °C
Citronellal (106-23-0)	Boiling point	47 °C at 1 mmHg Source: AKRON
	Flash point (closed cup)	74 °C
	Vapour pressure	0.22 mm Hg Source: AKRON
dl-Citronellol (106-22-9)	Boiling point	224.5 °C Source: ChemIDplus
	Flash point (closed cup)	107 °C
	Auto-ignition temperature	240 °C Source: ECHA

Component	Property	Result
	Vapour pressure	0.02 mm Hg at 25 °C Source: HSDB
Geraniol (106-24-1)	Boiling point	230 °C
	Flash point (closed cup)	108 °C
Nerol (106-25-2)	Boiling point	225.31 °C Atm. press.: 999,91 hPa Decomposition: 'no'
	Flash point (closed cup)	102 °C
beta-Phellandrene (555-10-2)	Boiling point	171 – 174 °C (760 mm Hg; Source:thegoodscentscompany.com)
	Flash point (closed cup)	44 °C
	Vapour pressure	1.573 mm Hg (760 mm Hg; Source:thegoodscentscompany.com)
Geranyl acetate (105-87-3)	Boiling point	243.97 °C Atm. press.: 1013,25 hPa
	Flash point (closed cup)	110 °C
	Vapour pressure	0.013 hPa Temp.: 20 °C
Camphene (79-92-5)	Boiling point	156 – 160 °C Atm. press.: 1013 mBar
	Flash point (closed cup)	29.5 °C Atm. press.: 1013 hPa
	Auto-ignition temperature	265 °C Source: ICSC
	Vapour pressure	25 mm Hg at 25 °C Source: HSDB
Caryophyllene oxide (1139-30-6)	Boiling point	263.48 °C Source: EPISUITE
	Vapour pressure	0.01 mm Hg at 25°C Source: EPISUITE
alpha-Terpineol (98-55-5)	Boiling point	218.9 °C Atm. press.: 1 atm
	Flash point (closed cup)	91 °C
	Auto-ignition temperature	275 °C Source: ECHA
	Vapour pressure	6.48 Pa Temp.: 23 °C
Eugenol (97-53-0)	Boiling point	248 °C Atm. press.: 755 mm Hg
	Flash point (closed cup)	124 °C Atm. press.: 1 atm
	Auto-ignition temperature	380 °C Source: ECHA
	Vapour pressure	0.0221 mm Hg at 25 °C Source: HSDB
Geranic acid (459-80-3)	Flash point (closed cup)	110 °C
Methyl salicylate (119-36-8)	Boiling point	222.9 °C Source: ChemIDplus
	Flash point (closed	95.5 °C

Component	Property	Result
	cup)	
	Auto-ignition temperature	454 °C Source: ICSC
	Vapour pressure	0.0343 mm Hg at 25 °C Source: ChemIDplus
Citronellyl propionate (141-14-0)	Flash point (closed cup)	104 °C
p-Mentha-1,4-diene (99-85-4)	Boiling point	181.8 °C Atm. press.: 100,7 kPa
	Flash point (closed cup)	51.8 °C
	Auto-ignition temperature	359 °C Source: ECHA
	Vapour pressure	1.09 mm Hg at 25 °C Source: National Library of Medicine
p-Cymene (99-87-6)	Boiling point	172 °C Source: International Uniform ChemicaL Information Database
	Flash point (closed cup)	47 °C
	Auto-ignition temperature	435 °C
	Vapour pressure	1.47 mm Hg Source: National Institute of Technology and Evaluation
4-Carvomenthenol (562-74-3)	Flash point (closed cup)	79 °C
Terpinolene (586-62-9)	Boiling point	193.85 °C Atm. press.: 985 hPa Decomposition: 'no'
	Flash point (closed cup)	61 °C
	Vapour pressure	0.74 mm Hg at 25°C Source: National Library of Medicine/Hazardous Substances Data Bank
p-Mentha-1,3-diene (99-86-5)	Boiling point	173 °C Atm. press.: 1 atm
	Flash point (closed cup)	47 °C
	Vapour pressure	0.8 mm Hg at 25°C Source: The Chemical Database, The Department of Chemistry at the University of Akron

9.2. Other information

Other safety characteristics

Refractive index (20°C): 1.4800 – 1.4900

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. Not established.

10.3. Possibility of hazardous reactions
No dangerous reactions known under normal conditions of use. Not established.

10.4. Conditions to avoid
None under recommended storage and handling conditions (see section 7). Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials
Strong acids. Strong bases.

10.6. Hazardous decomposition products
Under normal conditions of storage and use, hazardous decomposition products should not be produced. 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

Component	Endpoint	Result
LITSEA CUBEBA EO CHINA (68855-99-2)	LD50 oral	> 5000 mg/kg bodyweight
	LD50 dermal	4800 mg/kg bodyweight
citral (5392-40-5)	LD50 oral rat	≈ 6800 mg/kg bodyweight Animal: rat
	LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat
	LD50 dermal rabbit	2250 mg/kg
	ATE CLP (dermal)	2250 mg/kg bodyweight
Limonene (5989-27-5/138-86-3/5989-54-8)	LD50 oral rat	5000 mg/kg Source: National Library of Medicine/Hazardous Substances Data Bank
	LD50 dermal rabbit	> 5000 mg/kg Source: National Library of Medicine
	ATE CLP (oral)	5000 mg/kg bodyweight
6-Methyl-5-hepten-2-one (110-93-0)	LD50 oral rat	≈ 3570 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
	LD50 oral	3570 mg/kg bodyweight
	LD50 dermal rabbit	> 5000 mg/kg bodyweight Animal: rabbit
	LC50 Inhalation - Rat (Vapours)	> 13.96 mg/l Source: SIDS;
Linalool (78-70-6)	LD50 oral rat	2790 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 2440 - 3180
	LD50 oral	2790 mg/kg
	LD50 dermal rabbit	5610 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), 95% CL: 3578 - 8374

Component	Endpoint	Result
	ATE CLP (oral)	2790 mg/kg bodyweight
	ATE CLP (dermal)	5610 mg/kg bodyweight
beta-Caryophyllene (87-44-5)	LD50 oral	> 5000 mg/kg bodyweight Animal: mouse, Animal sex: male
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)
beta-Pinene (127-91-3)	LD50 oral rat	4700 mg/kg Source: NLM,THOMSON
alpha-Pinene (80-56-8)	LD50 oral rat	2100 mg/kg Source: International Uniform ChemicaL Information Database
	LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))
	ATE CLP (oral)	500 mg/kg bodyweight
Eucalyptol (470-82-6)	LD50 oral rat	2480 mg/kg Source: NLM; chemIDplus, TOMES;LOLI, RTECS;
	LD50 oral	2480 mg/kg bodyweight
	LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))
	ATE CLP (oral)	2480 mg/kg bodyweight
Citronellal (106-23-0)	LD50 oral rat	2420 mg/kg Source: NLM;ChemIDplus, TOMES;LOLI;
	LD50 oral	2500 mg/kg
	LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat
	LD50 dermal rabbit	2500 – 5000 mg/kg bodyweight Animal: rabbit
	ATE CLP (oral)	2420 mg/kg bodyweight
	ATE CLP (dermal)	2500 mg/kg bodyweight
dl-Citronellol (106-22-9)	LD50 oral rat	3450 mg/kg Source: National Library of Medicine
	LD50 oral	3450 mg/kg bodyweight
	LD50 dermal rabbit	2650 mg/kg Source: National Library of Medicine
	LD50 dermal	2650 mg/kg bodyweight
	ATE CLP (oral)	3450 mg/kg bodyweight
	ATE CLP (dermal)	2650 mg/kg bodyweight
Geraniol (106-24-1)	LD50 oral rat	3600 mg/kg bodyweight Animal: rat, 95% CL: 2840 - 4570
	LD50 oral	3600 mg/kg bodyweight
	LD50 dermal rabbit	> 5000 mg/kg bodyweight Animal: rabbit
	ATE CLP (oral)	3600 mg/kg bodyweight
Nerol (106-25-2)	LD50 oral rat	4500 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 3400 - 5600

Component	Endpoint	Result
	LD50 oral	4500 mg/kg bodyweight
	LD50 dermal rabbit	> 5000 mg/kg bodyweight Animal: rabbit
	ATE CLP (oral)	4500 mg/kg bodyweight
Geranyl acetate (105-87-3)	LD50 oral rat	6330 mg/kg bodyweight Animal: rat, 95% CL: 5450 - 7340
	ATE CLP (oral)	6330 mg/kg bodyweight
Camphene (79-92-5)	LD50 oral rat	> 2000 mg/kg bodyweight Animal: other:rat and mouse
	LD50 oral	> 5000 mg/kg bodyweight Animal: mouse
	LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit
Caryophyllene oxide (1139-30-6)	LD50 oral rat	> 5000 mg/kg Source: TOMES, RTECS, ChemIDplus
	LD50 dermal rabbit	> 2000 mg/kg Source: RTECS, ChemIDplus
7-Methyl-3-methyleneoct-6-enal (55050-40-3)	LD50 oral	3220 mg/kg bodyweight
Isocitral #1 (72203-97-5)	LD50 oral	3220 mg/kg bodyweight
alpha-Terpineol (98-55-5)	LD50 oral rat	4300 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 2900 - 5700
	LD50 oral	4300 mg/kg bodyweight
	LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
	ATE CLP (oral)	4300 mg/kg bodyweight
Eugenol (97-53-0)	LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method)
	LD50 oral	1500 – 1500 mg/kg bodyweight Animal: mouse, Animal sex: male, Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method)
	LC50 Inhalation - Rat (Vapours)	> 2580 mg/l
Geranic acid (459-80-3)	LD50 oral rat	3700 mg/kg Source: National Library of Medicine
	LD50 oral	3700 mg/kg bodyweight
	LD50 dermal rabbit	1750 mg/kg Source: National Library of Medicine
	LD50 dermal	1750 mg/kg bodyweight
	ATE CLP (dermal)	1100 mg/kg bodyweight
Methyl salicylate (119-36-8)	LD50 oral rat	887 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 715 - 1100
	LD50 oral	890 mg/kg bodyweight
	ATE CLP (oral)	890 mg/kg bodyweight
p-Mentha-1,4-diene (99-	LD50 oral rat	3650 mg/kg Source: National Library of Medicine

Component	Endpoint	Result
85-4)		
	LD50 oral	3650 mg/kg bodyweight
	LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
p-Cymene (99-87-6)	LD50 oral rat	3669 mg/kg Source: Corporate Solution From Thomson Micromedex
	LD50 oral	4750 mg/kg bodyweight
	LD50 dermal rabbit	> 5000 mg/kg bodyweight Animal: rabbit, Guideline: other:
	LC50 Inhalation - Rat (Vapours)	9.7 mg/l/4h
	ATE CLP (gases)	700 ppmv/4h
	ATE CLP (vapours)	3 mg/l
	ATE CLP (dust,mist)	0.5 mg/l/4h
4-Carvomenthenol (562-74-3)	LD50 oral rat	1300 mg/kg
	LD50 oral	1300 mg/kg
	LD50 dermal rabbit	> 2500 mg/kg
	LC50 Inhalation - Rat	> 1.11 mg/l air Animal: rat, Guideline: OECD Guideline 436 (Acute Inhalation Toxicity: Acute Toxic Class Method)
	ATE CLP (dermal)	2500 mg/kg bodyweight
	ATE CLP (dust,mist)	1.5 mg/l/4h
Terpinolene (586-62-9)	LD50 oral rat	4.39 ml/kg Source: ECHA
	LD50 oral	3775 mg/kg
	LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
	LD50 dermal rabbit	> 4300 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
	ATE CLP (oral)	4390 mg/kg bodyweight
p-Mentha-1,3-diene (99-86-5)	LD50 oral rat	1680 mg/kg Source: Corporate Solution From Thomson Micromedex
	LD50 oral	1680 mg/kg bodyweight
	LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
	ATE CLP (oral)	1680 mg/kg bodyweight

Skin corrosion/irritation: Causes skin irritation.

Component	Property	Result
citral (5392-40-5)	pH	< 5 Source: HSDB

Component	Property	Result
4-Carvomenthenol (562-74-3)	pH	6.8 – 7.1 Temp.: 20 °C

Serious eye damage/irritation: Causes serious eye irritation.

Component	Property	Result
citral (5392-40-5)	pH	< 5 Source: HSDB
4-Carvomenthenol (562-74-3)	pH	6.8 – 7.1 Temp.: 20 °C

Respiratory or skin sensitisation: May cause an allergic skin reaction.
Germ cell mutagenicity: Not classified
Additional information: Based on available data, the classification criteria are not met
Carcinogenicity: Not classified
Additional information: Based on available data, the classification criteria are not met

Component	Endpoint	Result
citral (5392-40-5)	NOAEL (chronic, oral, animal/male, 2 years)	60 mg/kg bodyweight Animal: mouse, Animal sex: male, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies), Remarks on results: other:Effect type: toxicity (migrated information)
Limonene (5989-27-5/138-86-3/5989-54-8)	IARC group	3 - Not classifiable
Myrcene (123-35-3)	IARC group	2B - Possibly carcinogenic to humans
Citronellal (106-23-0)	NOAEL (chronic, oral, animal/male, 2 years)	60 mg/kg bodyweight Animal: mouse, Animal sex: male, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies), Remarks on results: other:Effect type: toxicity (migrated information)
Geraniol (106-24-1)	NOAEL (chronic, oral, animal/male, 2 years)	60 mg/kg bodyweight Animal: mouse, Animal sex: male, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies), Remarks on results: other:Effect type: toxicity (migrated information)
Eugenol (97-53-0)	IARC group	3 - Not classifiable

Reproductive toxicity: Not classified
Additional information: Based on available data, the classification criteria are not met

Component	Endpoint	Result
Limonene (5989-27-5/138-86-3/5989-54-8)	NOAEL (animal/female, F0/P)	600 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: other:
p-Mentha-1,4-diene (99-85-4)	NOAEL (animal/male, F0/P)	250 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
	NOAEL (animal/female, F0/P)	100 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity

Component	Endpoint	Result
		Screening Test)
	NOAEL (animal/male, F1)	250 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
	NOAEL (animal/female, F1)	100 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
p-Cymene (99-87-6)	NOAEL (animal/male, F0/P)	50 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
	NOAEL (animal/female, F0/P)	100 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
Terpinolene (586-62-9)	NOAEL (animal/male, F0/P)	294.6 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
	NOAEL (animal/female, F0/P)	161.5 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)

STOT-single exposure: Not classified
Additional information: Based on available data, the classification criteria are not met

Component	Endpoint	Result
4-Carvomenthenol (562-74-3)	STOT-single exposure	May cause drowsiness or dizziness.

STOT-repeated exposure: Not classified
Additional information: Based on available data, the classification criteria are not met

Component	Endpoint	Result
citral (5392-40-5)	LOAEC (inhalation, rat, gas, 90 days)	68 ppm Animal: rat, Animal sex: female
	NOAEL (oral, rat, 90 days)	100 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
	NOAEC (inhalation, rat, gas, 90 days)	34 ppm Animal: rat, Animal sex: female
	NOAEL (subchronic, oral, animal/male, 90 days)	60 mg/kg bodyweight Animal: mouse, Animal sex: male, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
6-Methyl-5-hepten-2-one (110-93-0)	NOAEL (oral, rat, 90 days)	50 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
Linalool (78-	NOAEL (dermal,	250 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 411

Component	Endpoint	Result
70-6)	rat/rabbit, 90 days)	(Subchronic Dermal Toxicity: 90-Day Study)
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 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 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 in Rodents)
Eucalyptol (470-82-6)	NOAEL (oral, rat, 90 days)	600 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: other:japanese Ministry of Economy Trade and Industry Guideline for 28 day repeat oral dose toxicity study., Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents), Guideline: EPA OPPTS 870.3150 (90-Day Oral Toxicity in Nonrodents)
Citronellal (106-23-0)	LOAEC (inhalation, rat, gas, 90 days)	68 ppm Animal: rat, Animal sex: female
	NOAEL (oral, rat, 90 days)	100 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
	NOAEC (inhalation, rat, gas, 90 days)	34 ppm Animal: rat, Animal sex: female
	NOAEL (subchronic, oral, animal/male, 90 days)	60 mg/kg bodyweight Animal: mouse, Animal sex: male, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
dl-Citronellol (106-22-9)	NOAEL (oral, rat, 90 days)	2000 mg/kg bodyweight Animal: rat, Guideline: other:
	NOAEC (inhalation, rat, dust/mist/fume, 90 days)	0.063 mg/l air Animal: rat, Guideline: OECD Guideline 412 (Subacute Inhalation Toxicity: 28-Day Study)
Geraniol (106-24-1)	NOAEL (dermal, rat/rabbit, 90 days)	300 mg/kg bodyweight Animal: rat, Guideline: other:OECD Guideline 421 (Reproduction/Developmental Toxicity Screening test), Guideline: other:EPA OPPTS 870.3550 (Reproduction/Developmental Toxicity Screening Test)
Geranyl acetate (105-87-3)	NOAEL (oral, rat, 90 days)	2000 mg/kg bodyweight Animal: rat, Guideline: other:Specifications for the Conduct of Studies to Evaluate the Toxic and Carcinogenic Potential of Chemical, Biological, and Physical Agents in Laboratory Animals for the National Toxicology Program (NTP)
alpha-Terpineol (98-55-5)	NOAEL (oral, rat, 90 days)	≥ 314 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
Eugenol (97-53-0)	NOAEL (subchronic, oral, animal/male, 90 days)	≥ 900 mg/kg bodyweight Animal: mouse, Animal sex: male, Guideline: other:OECD Guideline 451 (Carcinogenicity Studies)
	NOAEL (subchronic, oral, animal/female, 90 days)	450 mg/kg bodyweight Animal: mouse, Animal sex: female, Guideline: other:OECD Guideline 451 (Carcinogenicity Studies)
Methyl salicylate (119-36-8)	NOAEL (oral, rat, 90 days)	50 mg/kg bodyweight Animal: rat

Aspiration hazard: May be fatal if swallowed and enters airways.

Component	Property	Result
LITSEA CUBEBA EO CHINA (68855-99-2)	Viscosity, kinematic	< 20.5 mm²/s
Linalool (78-70-6)	Viscosity, kinematic	5.192 mm²/s
dl-Citronellol (106-22-9)	Viscosity, kinematic	12.984 mm²/s

11.2. Information on other hazards

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

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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general: Toxic to aquatic life with long lasting effects.
Ecology - water: Toxic to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short–term (acute): Not classified
Hazardous to the aquatic environment, long–term (chronic): Toxic to aquatic life with long lasting effects.

Substance	Endpoint	Result
LITSEA CUBEBA EO CHINA (68855-99-2)	LC50 - Fish [1]	4.2 mg/l
	EC50 - Crustacea [1]	4.2 mg/l
	EC50 72h - Algae [1]	25 mg/l
	NOEC chronic algae	10 mg/l
citral (5392-40-5)	LC50 - Fish [1]	6.78 mg/l Test organisms (species): Leuciscus idus
	EC50 - Crustacea [1]	6.8 mg/l Test organisms (species): Daphnia magna
	EC50 72h - Algae [1]	103.8 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
Limonene (5989-27-5/138-86-3/5989-54-8)	LC50 - Fish [1]	0.7 mg/l Source: The ECOTOXicology database
	LC50 - Fish [2]	702 µg/l Test organisms (species): Pimephales promelas
	EC50 - Crustacea [1]	0.307 mg/l Source: ECHA Registered substances
	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)

Substance	Endpoint	Result
	EC50 72h - Algae [2]	0.214 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
6-Methyl-5-hepten-2-one (110-93-0)	LC50 - Fish [1]	50 mg/l Test organisms (species): Leuciscus idus
	EC50 - Crustacea [1]	74 mg/l Test organisms (species): Daphnia magna
	EC50 72h - Algae [1]	≈ 116 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
Linalool (78-70-6)	LC50 - Fish [1]	27.8 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
	EC50 - Crustacea [1]	59 mg/l Test organisms (species): Daphnia magna
	EC50 96h - Algae [1]	88.3 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
	EC50 96h - Algae [2]	156.7 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
beta-Caryophyllene (87-44-5)	EC50 - Crustacea [1]	> 0.17 mg/l Test organisms (species): Daphnia magna
	EC50 72h - Algae [1]	> 0.033 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
Myrcene (123-35-3)	LC50 - Fish [1]	0.92 mg/l Source: NITE
	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)
beta-Pinene (127-91-3)	LC50 - Fish [1]	0.624 mg/l Source: ECOSAR
alpha-Pinene (80-56-8)	LC50 - Fish [1]	0.28 mg/l Source: International Uniform ChemicaL Information Database
	EC50 - Crustacea [1]	0.475 mg/l Test organisms (species): Daphnia magna
Eucalyptol (470-82-6)	LC50 - Fish [1]	57 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
	EC50 - Crustacea [1]	> 100 mg/l Test organisms (species):

Substance	Endpoint	Result
		Daphnia magna
	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)
Citronellal (106-23-0)	LC50 - Fish [1]	≈ 22 mg/l Test organisms (species): Leuciscus idus
	EC50 - Crustacea [1]	8.7 mg/l Test organisms (species): Daphnia magna
	EC50 72h - Algae [1]	13.33 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
	EC50 72h - Algae [2]	6.74 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
	EC50 96h - Algae [1]	13.33 mg/l Source: ECHA
dl-Citronellol (106-22-9)	LC50 - Fish [1]	3.958 mg/l Source: Ecological Structure Activity Relationships
	EC50 - Crustacea [1]	17.48 mg/l Test organisms (species): Daphnia magna
	EC50 72h - Algae [1]	2.4 mg/l Test organisms (species):
	EC50 96h - Algae [1]	3.231 mg/l Source: Ecological Structure Activity Relationships
Geraniol (106-24-1)	LC50 - Fish [1]	≈ 22 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
	EC50 - Crustacea [1]	10.8 mg/l Test organisms (species): Daphnia magna
	EC50 72h - Algae [1]	13.1 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
Nerol (106-25-2)	LC50 - Fish [1]	≈ 22 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
	EC50 - Crustacea [1]	10.8 mg/l Test organisms (species): Daphnia magna
	EC50 72h - Algae [1]	13.9 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
Geranyl acetate (105-87-3)	LC50 - Fish [1]	68.12 mg/l Test organisms (species): Leuciscus idus
	EC50 - Crustacea [1]	14.1 mg/l Test organisms (species): Daphnia magna
	EC50 72h - Algae [1]	3.72 mg/l Test organisms (species): Desmodesmus subspicatus (previous name:

Substance	Endpoint	Result
		Scenedesmus subspicatus)
Camphene (79-92-5)	LC50 - Fish [1]	0.72 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
	EC50 - Crustacea [1]	0.72 mg/l Test organisms (species): Daphnia magna
	EC50 72h - Algae [1]	1.75 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
	EC50 96h - Algae [1]	214 mg/l Source: ECOTOX
Caryophyllene oxide (1139-30-6)	LC50 - Fish [1]	0.444 mg/l Source: EPISUITE
	EC50 96h - Algae [1]	0.281 mg/l Source: EPISUITE
alpha-Terpineol (98-55-5)	LC50 - Fish [1]	70 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
	EC50 - Crustacea [1]	73 mg/l Test organisms (species): Daphnia magna
	EC50 72h - Algae [1]	≈ 68 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
	EC50 72h - Algae [2]	≈ 17 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
Eugenol (97-53-0)	LC50 - Fish [1]	13 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
	EC50 - Crustacea [1]	1.05 mg/l Test organisms (species): Daphnia magna
Geranic acid (459-80-3)	LC50 - Fish [1]	41.567 mg/l Source: Ecological Structure Activity Relationships
	EC50 96h - Algae [1]	29.896 mg/l Source: Ecological Structure Activity Relationships
Methyl salicylate (119-36-8)	LC50 - Fish [1]	19.8 mg/l Test organisms (species): Pimephales promelas
	LC50 - Fish [2]	1370 mg/l Test organisms (species): Pimephales promelas
	EC50 - Crustacea [1]	28 mg/l Test organisms (species): Daphnia magna
	EC50 72h - Algae [1]	1.6 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
	EC50 72h - Algae [2]	1.1 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
	EC50 96h - Algae [1]	0.895 mg/l Source: ECOSAR
Citronellyl propionate	EC50 96h - Algae [1]	0.221 mg/l

Substance	Endpoint	Result
(141-14-0)		
p-Mentha-1,4-diene (99-85-4)	LC50 - Fish [1]	0.263 mg/l Source: Ecological Structure Activity Relationships
	EC50 - Crustacea [1]	10189 mg/l Test organisms (species): Daphnia magna
	EC50 72h - Algae [1]	> 10.82 mg/l Test organisms (species): Scenedesmus capricornutum
	EC50 96h - Algae [1]	0.249 mg/l Source: Ecological Structure Activity Relationships
p-Cymene (99-87-6)	LC50 - Fish [1]	48 mg/l Source: ECOTOX
	EC50 - Crustacea [1]	3.7 mg/l Test organisms (species): Daphnia magna
	EC50 72h - Algae [1]	4.03 mg/l Test organisms (species): Scenedesmus capricornutum
	EC50 72h - Algae [2]	2.01 mg/l Test organisms (species): Scenedesmus capricornutum
	EC50 96h - Algae [1]	22 mg/l Source: The ECOTOXicology database
4-Carvomenthenol (562-74-3)	LC50 - Fish [1]	8.004 mg/l Source: EPI SUITE
	EC50 - Other aquatic organisms [1]	26.6 mg/l Test organisms (species):
	EC50 96h - Algae [1]	4.651 mg/l Source: EPI SUITE
Terpinolene (586-62-9)	LC50 - Fish [1]	0.805 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
	EC50 - Crustacea [1]	0.634 mg/l Test organisms (species): Daphnia magna
	EC50 72h - Algae [1]	0.692 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
	EC50 72h - Algae [2]	0.302 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
p-Mentha-1,3-diene (99-86-5)	LC50 - Fish [1]	0.263 mg/l Source: Ecological Structure Activity Relationships
	EC50 - Crustacea [1]	1.7 mg/l Test organisms (species): Daphnia magna
	EC50 96h - Algae [1]	0.249 mg/l Source: Ecological Structure Activity Relationships

12.2. Persistence and degradability

Substance	Property	Result
LITSEA CUBEBA EO CHINA (68855-99-2)	Persistence and degradability	May cause long-term adverse effects in the environment.

Substance	Property	Result
LITSEA CUBEBA EO CHINA (68855-99-2)	Biodegradation	104 % In a CO2 evolution test (OECD 301B, GLP), it was shown that Litsea cubeba oil is readily biodegradable (104%, 28d).

Substance	Persistence and degradability
citral (5392-40-5)	Rapidly degradable
Limonene (5989-27-5/138-86-3/5989-54-8)	Rapidly degradable
6-Methyl-5-hepten-2-one (110-93-0)	Rapidly degradable
Linalool (78-70-6)	Rapidly degradable
beta-Caryophyllene (87-44-5)	Rapidly degradable
Myrcene (123-35-3)	Rapidly degradable
beta-Pinene (127-91-3)	Rapidly degradable
alpha-Pinene (80-56-8)	Rapidly degradable
Eucalyptol (470-82-6)	Rapidly degradable
Citronellal (106-23-0)	Rapidly degradable
dl-Citronellol (106-22-9)	Rapidly degradable
Geraniol (106-24-1)	Rapidly degradable
Nerol (106-25-2)	Rapidly degradable
beta-Phellandrene (555-10-2)	Rapidly degradable
Geranyl acetate (105-87-3)	Rapidly degradable
Camphene (79-92-5)	Rapidly degradable
Caryophyllene oxide (1139-30-6)	Rapidly degradable
7-Methyl-3-methyleneoct-6-enal (55050-40-3)	Rapidly degradable
Isocitral #1 (72203-97-5)	Rapidly degradable
alpha-Terpineol (98-55-5)	Rapidly degradable
Eugenol (97-53-0)	Rapidly degradable
Geranic acid (459-80-3)	Rapidly degradable
Methyl salicylate (119-36-8)	Rapidly degradable
Citronellyl propionate (141-14-0)	Rapidly degradable
p-Mentha-1,4-diene (99-85-4)	Rapidly degradable
p-Cymene (99-87-6)	Rapidly degradable
4-Carvomenthenol (562-74-3)	Rapidly degradable
Terpinolene (586-62-9)	Rapidly degradable
p-Mentha-1,3-diene (99-86-5)	Rapidly degradable

12.3. Bioaccumulative potential

LITSEA CUBEBA EO CHINA (68855-99-2)
Partition coefficient n-octanol/water (Log Kow): 2.06 – 6.3
Bioaccumulative potential: Not established.

Component	Partition coefficient n-octanol/water (Log Pow)
citral (5392-40-5)	2.76 Source: ECHA

Component	Partition coefficient n-octanol/water (Log Pow)
Limonene (5989-27-5/138-86-3/5989-54-8)	4.57
6-Methyl-5-hepten-2-one (110-93-0)	2.4 Source: IUCLID
Linalool (78-70-6)	2.97 Source: International Chemical Safety Cards
Myrcene (123-35-3)	4.17
beta-Pinene (127-91-3)	4.16
alpha-Pinene (80-56-8)	4.834 Source: International Uniform ChemicaL Information Database
Eucalyptol (470-82-6)	2.74
Citronellal (106-23-0)	3.48 Source: AKRON
dl-Citronellol (106-22-9)	3.91 Source: National Library of Medicine
Geraniol (106-24-1)	3.56
Nerol (106-25-2)	3.47
Camphene (79-92-5)	4.1 Source: ICSC
Caryophyllene oxide (1139-30-6)	4.91
alpha-Terpineol (98-55-5)	2.98 Source: HSDB
Eugenol (97-53-0)	2.27 Source: ChemIDplus
Geranic acid (459-80-3)	3.7 Source: Quantitative Structure Activity Relation
Methyl salicylate (119-36-8)	2.55 Source: ICSC
p-Mentha-1,4-diene (99-85-4)	4.5 Source: NLM
p-Cymene (99-87-6)	4.1 Source: International Chemical Safety Cards
4-Carvomenthenol (562-74-3)	3.26 Source: NLM;ChemIDPlus
Terpinolene (586-62-9)	4.47 Source: National Library of Medicine/Hazardous Substances Data Bank
p-Mentha-1,3-diene (99-86-5)	4.25 Source: ChemIDplus

12.4. Mobility in soil

LITSEA CUBEBA EO CHINA (68855-99-2)
Organic Carbon Normalized Adsorption Coefficient (Log Koc): 1.622 – 4.251

Component	Mobility in soil
6-Methyl-5-hepten-2-one (110-93-0)	182 Source: EPISUITE
Linalool (78-70-6)	76 Source: HSDB
alpha-Pinene (80-56-8)	2600 Source: HSDB
Eucalyptol (470-82-6)	223.9 Source: EPISUITE
Citronellal (106-23-0)	652.1
dl-Citronellol (106-22-9)	70.79 Source: Quantitative Structure Activity Relation
Caryophyllene oxide (1139-30-6)	3551 Source: EPISUITE
alpha-Terpineol (98-55-5)	1000 Source: HSDB
Eugenol (97-53-0)	409 Source: HSDB
Geranic acid (459-80-3)	159.3 Source: Quantitative Structure Activity Relation
4-Carvomenthenol (562-74-3)	207.4 Source: EPI SUITE

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

LITSEA CUBEBA EO CHINA (68855-99-2)	Details
Other information	Avoid release to the environment.

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.

Product/Packaging disposal recommendations: Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Ecological waste information: Avoid release to the environment. Hazardous waste due to toxicity.

SECTION 14: Transport information

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

Description	ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number	UN 3082	UN 3082	UN 3082	UN 3082	UN 3082
14.2. UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (alpha-Pinene ; beta-Pinene)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (alpha-Pinene ; beta-Pinene)	Environmentally hazardous substance, liquid, n.o.s. (alpha-Pinene ; beta-Pinene)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (alpha-Pinene ; beta-Pinene)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (alpha-Pinene ; beta-Pinene)
Transport document description	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (alpha-Pinene ; beta-Pinene), 9, III, (-)	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (alpha-Pinene ; beta-Pinene), 9, III, MARINE POLLUTANT	UN 3082 Environmentally hazardous substance, liquid, n.o.s. (alpha-Pinene ; beta-Pinene), 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (alpha-Pinene ; beta-Pinene), 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (alpha-Pinene ; beta-Pinene), 9, III

Description	ADR	IMDG	IATA	ADN	RID
14.3. Transport hazard class(es)	9	9	9	9	9
Transport labels	Class 9 and environmentally hazardous substance marks	Class 9 and environmentally hazardous substance marks	Class 9 and environmentally hazardous substance marks	Class 9 and environmentally hazardous substance marks	Class 9 and environmentally hazardous substance marks
14.4. Packing group	III	III	III	III	III
14.5. Environmental hazards	Dangerous for the environment: Yes	Dangerous for the environment: Yes. Marine pollutant: Yes. EmS-No. (Fire): F-A. EmS-No. (Spillage): S-F	Dangerous for the environment: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes

No supplementary information available

14.6. Special precautions for user

Overland transport

Description	Details
Classification code (ADR)	M6
Special provisions (ADR)	274, 335, 375, 601, 650
Limited quantities (ADR)	5l
Excepted quantities (ADR)	E1
Packing instructions (ADR)	P001, IBC03, LP01, R001
Special packing provisions (ADR)	PP1
Mixed packing provisions (ADR)	MP19
Portable tank and bulk container instructions (ADR)	T4
Portable tank and bulk container special provisions (ADR)	TP1, TP29
Tank code (ADR)	LGBV
Vehicle for tank carriage	AT
Transport category (ADR)	3
Special provisions for carriage - Packages (ADR)	V12
Special provisions for carriage - Loading, unloading and handling (ADR)	CV13
Hazard identification number (Kemler No.)	90
Orange plates	90 above 3082
Tunnel restriction code (ADR)	-
EAC code	• 3Z

Transport by sea

Description	Details
Special provisions (IMDG)	274, 335, 375, 969
Limited quantities (IMDG)	5L
Excepted quantities (IMDG)	E1
Packing instructions (IMDG)	LP01, P001
Special packing provisions (IMDG)	PP1
IBC packing instructions (IMDG)	IBC03
Tank instructions (IMDG)	T4
Tank special provisions (IMDG)	TP1, TP29
Stowage category (IMDG)	A
MFAG-No	171

Air transport

Description	Details
PCA Excepted quantities (IATA)	E1
PCA Limited quantities (IATA)	Y964
PCA limited quantity max net quantity (IATA)	30kgG
PCA packing instructions (IATA)	964
PCA max net quantity (IATA)	450L
CAO packing instructions (IATA)	964
CAO max net quantity (IATA)	450L
Special provisions (IATA)	A97, A158, A197, A215
ERG code (IATA)	9L

Inland waterway transport

Description	Details
Classification code (ADN)	M6
Special provisions (ADN)	274, 335, 375, 601, 650
Limited quantities (ADN)	5L
Excepted quantities (ADN)	E1
Carriage permitted (ADN)	T
Equipment required (ADN)	PP
Number of blue cones/lights (ADN)	0

Rail transport

Description	Details
Classification code (RID)	M6
Special provisions (RID)	274, 335, 375, 601, 650
Limited quantities (RID)	5L

Description	Details
Excepted quantities (RID)	E1
Packing instructions (RID)	P001, IBC03, LP01, R001
Special packing provisions (RID)	PP1
Mixed packing provisions (RID)	MP19
Portable tank and bulk container instructions (RID)	T4
Portable tank and bulk container special provisions (RID)	TP1, TP29
Tank codes for RID tanks (RID)	LGBV
Transport category (RID)	3
Special provisions for carriage – Packages (RID)	W12
Special provisions for carriage - Loading, unloading and handling (RID)	CW13, CW31
Colis express (express parcels) (RID)	CE8
Hazard identification number (RID)	90

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

EU-Regulations

Regulation	Details
REACH Annex XVII (Restriction List)	Not listed on REACH Annex XVII
REACH Annex XIV (Authorisation List)	Not 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 (2024/590)	Not listed on the Ozone Depletion list (Regulation EU 2024/590)
Council Regulation (EC) for the control of dual-use items	Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items
Explosives Precursors Regulation (EU 2019/1148)	Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)
Drug Precursors	Contains no substance(s) listed on the Drug Precursors list (Regulation EC

Regulation	Details
Regulation (EC 273/2004)	273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

National regulations

Germany

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

Netherlands

Description	Details
SZW-lijst van kankerverwekkende stoffen	The substance is not listed
SZW-lijst van mutagene stoffen	The substance is not listed
SZW-lijst van reprotoxische stoffen – Borstvoeding	The substance is not listed
SZW-lijst van reprotoxische stoffen – Vruchtbaarheid	The substance is not listed
SZW-lijst van reprotoxische stoffen – Ontwikkeling	The substance is not listed

Denmark

Description	Details
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

Poland

Polish National Regulations

Act of 25 February 2011 on chemical substances and their mixtures (J. o L. No. 63, item 322 as amended; consolidated text J. o L. 2019, item 1225).

Act of 14 December 2012 on waste (J. o L. 2013, item 322 as amended; consolidated text J. o L. 2020, item 797).

The announcement of Marshal of the Sejm of the Republic of Poland dated 19 October 2016 concerning the consolidated text announcement of the decree on the management of packaging and packaging waste (J. o L. 2016, item 1863 as amended).

Decree of the Minister of Environment of 14 December 2014 on the catalogue of waste (J. o L. 2014, item 1923).

Act of 19 August 2011 on the Carriage of Dangerous Goods (J. o L. 2011 No. 227, item 1367 as amended; consolidated text J. o L. 2020, item 154).

Regulation of the Minister of Family, Labour and Social Policy of 12 June 2018 on the highest permissible concentration and intensity of noxious agents for health at work environment (J. o L. item 1286 as amended).

The announcement of Minister of Health dated 9 September 2016 concerning the consolidated text announcement of the decree of the Minister of Health of 30 December 2004 on health and safety at work related to exposure to chemical agents at work (J. o L. of 16 September 2016, item 1488)

Regulation of the Minister of Health of 2 February 2011 on tests and measurements of the noxious agents for health at work environment (J. o L. No. 33, item 166 as amended).

Regulation of the Minister of Environment of 9 December 2003 on particularly hazardous substances to the environment (J. o L. No. 217, item 2141).

ADR Agreement: Government Statement of 13 March 2023 on the entry into force of amendments to Annexes A and B to the Agreement concerning the International Carriage of Dangerous Goods by Road (ADR), signed in Geneva on 30 September 1957 (J. o. L. 2023, item 891)

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes

Section	Changed item	Comments
3	Composition/information on ingredients	Modified
14	Carriage permitted (ADN)	Added
14	Special provisions (RID)	Modified
14	Special provisions (IATA)	Modified
14	Special provisions (IMDG)	Modified
14.6	Special provisions (ADR)	Modified
14.6	Special provisions (ADN)	Modified

Abbreviations and acronyms

Abbreviation	Description
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)

Abbreviation	Description
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC No (EC/EINECS/ELINCS)	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
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	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disruptor

Data sources: 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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information: None.

Full text of H- and EUH-statements

Classification or code	Description
Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3

Classification or code	Description
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
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
Repr. 2	Reproductive toxicity, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1B	Skin sensitisation, category 1B
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Narcosis
H226	Flammable liquid and vapour.
H228	Flammable solid.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H336	May cause drowsiness or dizziness.
H361	Suspected of damaging fertility or the unborn child.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

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.

Authorised by:
Fozia Khot
Director