

#### Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 1/31/2024 Version: 1.0

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

#### 1.1. Product identifier

Product form : Substance

Substance name : EO Rosemary CT cineol (org)

 IUPAC name
 : Rosemary, ext.

 EC-No.
 : 283-291-9

 CAS-No.
 : 84604-14-8

 REACH registration No.
 : 01-2120086955-39

Product code : 20106
Product group : Trade product

Other means of identification : Essential oil of Rosmarinus officinalis L. (Lamiaceae) obtained from leaves, flowers and

twigs by steam distillation

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

#### 1.2.1. Relevant identified uses

Intended for general public

Main use category : Professional use, Consumer use Use of the substance/mixture : Fragrance raw material

#### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

De Hekserij Spoorstraat 57 8271 RG IJsselmuiden Nederland www.hekserij.nl

#### 1.4. Emergency telephone number

No additional information available

#### **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

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

Flammable liquids, Category 3 H226
Skin corrosion/irritation, Category 2 H315
Serious eye damage/eye irritation, Category 2 H319
Skin sensitisation, category 1B H317
Specific target organ toxicity – Single exposure, Category 2 H371
Aspiration hazard, Category 1 H304
Hazardous to the aquatic environment – Chronic Hazard, H410

Category 1

Full text of H- and EUH-statements: see section 16

#### Adverse physicochemical, human health and environmental effects

Flammable liquid and vapour. May cause damage to organs. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May be fatal if swallowed and enters airways. Very toxic to aquatic life with long lasting effects.

#### Safety Data Sheet

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

#### 2.2. Label elements

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

Hazard pictograms (CLP)









GHS02

GHS07

7 GHS08

GHS09

Signal word (CLP) : Danger

Hazard statements (CLP) : H226 - Flammable liquid and vapour.

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.

H371 - May cause damage to organs (central nervous system) (oral).

H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

No smoking.

P233 - Keep container tightly closed.

P264 - Wash hands, forearms and face thoroughly after handling.

P273 - Avoid release to the environment.

P280 - Wear eye protection, face protection, protective gloves.

P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER, a doctor.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P331 - Do NOT induce vomiting.

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

P337+P313 - If eye irritation persists: Get medical advice/attention.

P391 - Collect spillage.

P403+P235 - Store in a well-ventilated place. Keep cool.

P501 - Dispose of contents and container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulation.

P240 - Ground and bond container and receiving equipment.

#### 2.3. Other hazards

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

#### **SECTION 3: Composition/information on ingredients**

#### 3.1. Substances

Substance type : Multi-constituent

Name : EO Rosemary CT cineol (org)

CAS-No. : 84604-14-8 EC-No. : 283-291-9

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Eukalyptol (1.8-Cineol)	CAS-No.: 470-82-6 EC-No.: 207-431-5	50.001 – 100	Flam. Liq. 3, H226 Skin Sens. 1B, H317
Pinene alpha	CAS-No.: 80-56-8 EC-No.: 201-291-9	10.001 – 20	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Asp. Tox. 1, H304

## Safety Data Sheet

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Bornan-2-one	CAS-No.: 76-22-2 EC-No.: 200-945-0	10.001 – 20	Flam. Sol. 2, H228 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 STOT SE 2, H371
Pinene beta	CAS-No.: 127-91-3 EC-No.: 204-872-5	5.001 – 10	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Asp. Tox. 1, H304
Camphene	CAS-No.: 79-92-5 EC-No.: 201-234-8	5.001 – 10	Flam. Sol. 1, H228 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Caryophyllene beta	CAS-No.: 87-44-5 EC-No.: 201-746-1	5.001 – 10	Skin Sens. 1B, H317 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
p-Cymene	CAS-No.: 99-87-6 EC-No.: 202-796-7 EC Index-No.: 601-094-00-1	1.001 – 5	Flam. Liq. 3, H226 Acute Tox. 3 (Inhalation), H331 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
4-Carvomenthenol	CAS-No.: 562-74-3 EC-No.: 209-235-5	1.001 – 5	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 3, H412
Lindenol (IFF)	CAS-No.: 98-55-5 EC-No.: 202-680-6 REACH-no: 01-2119980717- 23	1.001 – 5	Skin Irrit. 2, H315 Eye Irrit. 2, H319
delta-3-carene	CAS-No.: 13466-78-9 EC-No.: 236-719-3	1.001 – 5	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Asp. Tox. 1, H304
Myrcene	CAS-No.: 123-35-3 EC-No.: 204-622-5	1.001 – 5	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
gamma Terpinene	CAS-No.: 99-85-4 EC-No.: 202-794-6	1.001 – 5	Flam. Liq. 3, H226 Repr. 2, H361 Aquatic Chronic 2, H411
Limonene D- (nat)	CAS-No.: 5989-27-5 EC-No.: 227-813-5 EC Index-No.: 601-096-00-2	1.001 – 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
Terpinene alpha	CAS-No.: 99-86-5 EC-No.: 202-795-1 EC Index-No.: 601-095-00-7	1.001 – 5	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Skin Sens. 1, H317 Asp. Tox. 1, H304 Aquatic Chronic 2, H411

#### Safety Data Sheet

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

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Linalool	CAS-No.: 78-70-6 EC-No.: 201-134-4 EC Index-No.: 603-235-00-2 REACH-no: 01-2119474016- 42	1.001 – 5	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317
Terpinolene	CAS-No.: 586-62-9 EC-No.: 209-578-0	0.101 – 1	Skin Sens. 1B, H317 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Oct-1-ene-3-ol	CAS-No.: 3391-86-4 EC-No.: 222-226-0	0.101 – 1	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Acute 1, H400

Full text of H- and EUH-statements: see section 16

#### 3.2. Mixtures

Not applicable

#### **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

First-aid measures general : Call a physician immediately.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Rinse skin with water/shower. Take off immediately all contaminated clothing. If skin

irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Do not induce vomiting. Call a physician immediately.

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

Symptoms/effects after inhalation : Although no appropriate human or animal health effects data are known to exist, this

material is expected to be an inhalation hazard.

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

Symptoms/effects after eye contact : Eye irritation.
Symptoms/effects after ingestion : Risk of lung oedema.

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

Treat symptomatically.

#### **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

Unsuitable extinguishing media : Do not use a heavy water stream.

#### 5.2. Special hazards arising from the substance or mixture

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

1/31/2024 (Issue date) EU - en 4/19

#### Safety Data Sheet

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

#### 5.3. Advice for firefighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper

protective equipment, including respiratory protection.

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

breathing apparatus. Complete protective clothing.

#### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters.

Absorb spillage to prevent material damage.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Do not breathe

dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information

refer to section 8: "Exposure controls/personal protection".

Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.

#### 6.2. Environmental precautions

Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

For containment : Collect spillage. Contain any spills with dikes or absorbents to prevent migration and entry

into sewers or streams. Stop leak without risks if possible.

Methods for cleaning up : Take up liquid spill into absorbent material. 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

For further information refer to section 13.

#### **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use. Precautions for safe handling : Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks,

: Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Do not breathe

dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.

Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always

wash hands after handling the product.

#### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ground/bond container and receiving equipment.

Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

Packaging materials : Store always product in container of same material as original container.

#### 7.3. Specific end use(s)

No additional information available

1/31/2024 (Issue date) EU - en 5/19

### Safety Data Sheet

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

#### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

#### 8.1.1 National occupational exposure and biological limit values

No additional information available

#### 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

EO Rosemary CT cineol (org) (84604-14-8)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	4.17 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	14.69 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	2.5 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	4.35 mg/m³
Long-term - systemic effects, dermal	2.5 mg/kg bodyweight/day

#### 8.1.5. Control banding

No additional information available

#### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station.

#### 8.2.2. Personal protection equipment

#### Personal protective equipment:

Wear recommended personal protective equipment.

#### Personal protective equipment symbol(s):







#### 8.2.2.1. Eye and face protection

#### Eye protection:

Safety glasses

#### 8.2.2.2. Skin protection

#### Skin and body protection:

Wear suitable protective clothing

#### Hand protection:

Protective gloves

#### 8.2.2.3. Respiratory protection

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

#### Safety Data Sheet

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

#### 8.2.2.4. Thermal hazards

No additional information available

#### 8.2.3. Environmental exposure controls

#### **Environmental exposure controls:**

Avoid release to the environment.

#### **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

Physical state : Liquid

Colour : Colourless - pale yellow.

Odour : Not available
Odour threshold : Not available
Melting point : <-20 °C
Freezing point : Not available

Boiling point : 158 – 210 °C Atm. press.: 1034 hPa Flammability : Flammable liquid and vapour.

: Not available

Lower explosion limit : Not available
Upper explosion limit : Not available
Flash point : 47.3 °C
Auto-ignition temperature : Not available
Decomposition temperature : Not available
pH : Not available
Viscosity, kinematic : 6 mm²/s (40 °C)
Solubility : Not available

Vapour pressure : 225.23 Pa Temp.: 25 °C

Vapour pressure at 50°C : Not available

Density : Not available

Relative density : 0.895 – 0.915 D20/20

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

No additional information available

#### **SECTION 10: Stability and reactivity**

Partition coefficient n-octanol/water (Log Kow)

#### 10.1. Reactivity

Flammable liquid and vapour.

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

#### 10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

#### 10.5. Incompatible materials

No additional information available

### Safety Data Sheet

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

### 10.6. Hazardous decomposition products

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

### **SECTION 11: Toxicological information**

11.1. In	formation on haz	ard classes as	defined in	Regulation	(EC) No	1272/2008	
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Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Acute toxicity (inhalation)	Not classified
Pinene alpha (80-56-8)	
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))
Bornan-2-one (76-22-2)	
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	> 10 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)
Camphene (79-92-5)	
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit
Caryophyllene beta (87-44-5)	
LD50 oral	> 5000 mg/kg bodyweight Animal: mouse, Animal sex: male, Remarks on results: not determinable due to absence of adverse toxic effects
p-Cymene (99-87-6)	
LD50 dermal rabbit	> 5000 mg/kg bodyweight Animal: rabbit, Guideline: other:
4-Carvomenthenol (562-74-3)	
LD50 oral rat	1300 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rabbit	2500 – 5000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Remarks on results: other:
Lindenol (IFF) (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 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
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/l Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
gamma Terpinene (99-85-4)	
LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method)
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
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## Safety Data Sheet

Limonene D- (nat) (5989-27-5)	
LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method)
Terpinene alpha (99-86-5)	
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
Linalool (78-70-6)	
LD50 oral rat	2790 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity) Remarks on results: other:, 95% CL: 2440 - 3180
LD50 dermal rabbit	5610 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), 95% CL: 3578 - 8374
Terpinolene (586-62-9)	
LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method)
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
Oct-1-ene-3-ol (3391-86-4)	
LD50 oral rat	175 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 425 (Acute Oral Toxicity: Up-and-Down Procedure), 95% CL: 87 - 426
Skin corrosion/irritation :	Causes skin irritation.
4-Carvomenthenol (562-74-3)	
рН	6.8 – 7.1 Temp.: 20 °C
Serious eye damage/irritation :	Causes serious eye irritation.
4-Carvomenthenol (562-74-3)	
рН	6.8 – 7.1 Temp.: 20 °C
Respiratory or skin sensitisation :	May cause an allergic skin reaction.
Germ cell mutagenicity :	Not classified
Carcinogenicity :	Not classified
Reproductive toxicity :	Not classified
EO Rosemary CT cineol (org) (84604-14-8)	
NOAEL (animal/male, F0/P)	1000 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: other:
NOAEL (animal/female, F0/P)	300 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: other:
gamma Terpinene (99-85-4)	
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)
STOT-single exposure :	May cause damage to organs (central nervous system) (oral).
Bornan-2-one (76-22-2)	
STOT-single exposure	May cause damage to organs.
STOT-repeated exposure :	Not classified

### Safety Data Sheet

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

Eukalyptol (1.8-Cineol) (470-82-6)	
NOAEL (oral, rat, 90 days)	600 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: other:, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents), Guideline: EPA OPPTS 870.3150 (90-Day Oral Toxicity in Non-rodents)
Bornan-2-one (76-22-2)	
NOAEL (oral, rat, 90 days)	3.2 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEL (dermal, rat/rabbit, 90 days)	250 mg/kg bodyweight Animal: rat, Guideline: other:
Lindenol (IFF) (98-55-5)	
NOAEL (oral, rat, 90 days)	≥ 314 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
Myrcene (123-35-3)	
LOAEL (oral, rat, 90 days)	250 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90- Day Oral Toxicity Study in Rodents)
NOAEL (subchronic, oral, animal/male, 90 days)	500 mg/kg bodyweight Animal: mouse, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEL (subchronic, oral, animal/female, 90 days)	250 mg/kg bodyweight Animal: mouse, Animal sex: female, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
Linalool (78-70-6)	
NOAEL (dermal, rat/rabbit, 90 days)	250 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)
Aspiration hazard :	May be fatal if swallowed and enters airways.
EO Rosemary CT cineol (org) (84604-14-8)	
Viscosity, kinematic	6 mm²/s (40 °C)
Linalool (78-70-6)	
Viscosity, kinematic	5191.86 mm²/s

#### 11.2. Information on other hazards

No additional information available

#### **SECTION 12: Ecological information**

### 12.1. Toxicity

Ecology - general : Very toxic to aquatic life with long lasting effects.

Hazardous to the aquatic environment, short–term : Not classified

(acute)

Hazardous to the aquatic environment, long-term : Very toxic to aquatic life with long lasting effects.

chronic)

(CITIOTIE)	
Eukalyptol (1.8-Cineol) (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): 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)

## Safety Data Sheet

Pinene alpha (80-56-8)	
LC50 - Fish [1]	0.303 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	0.475 mg/l Test organisms (species): Daphnia magna
Bornan-2-one (76-22-2)	
LC50 - Fish [1]	33.25 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	4.23 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	0.3 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	1.71 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
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)
Caryophyllene beta (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): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
p-Cymene (99-87-6)	
LC50 - Fish [1]	48 mg/l Test organisms (species): Cyprinodon variegatus
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
4-Carvomenthenol (562-74-3)	
LC50 - Fish [1]	15.6 mg/l Test organisms (species):
EC50 - Other aquatic organisms [1]	26.6 mg/l Test organisms (species):
Lindenol (IFF) (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)
Myrcene (123-35-3)	
EC50 - Crustacea [1]	1.47 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	0.342 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	0.31 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)

### Safety Data Sheet

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

gamma Terpinene (99-85-4)	
EC50 - Crustacea [1]	10189 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 10.82 mg/l Test organisms (species): Scenedesmus capricornutum
Limonene D- (nat) (5989-27-5)	
LC50 - Fish [1]	720 μg/l Test organisms (species): Pimephales promelas
LC50 - Fish [2]	702 μg/l Test organisms (species): Pimephales promelas
EC50 - Crustacea [1]	0.307 mg/l Test organisms (species): Daphnia magna
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)
EC50 72h - Algae [2]	0.214 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
Terpinene alpha (99-86-5)	
LC50 - Fish [1]	3150 µg/l Test organisms (species): Pimephales promelas
EC50 - Crustacea [1]	1.7 mg/l Test organisms (species): Daphnia magna
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)
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]	11.69 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
Oct-1-ene-3-ol (3391-86-4)	
EC50 - Crustacea [1]	8.02 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	7.05 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
	•

### 12.2. Persistence and degradability

EO Rosemary CT cineol (org) (84604-14-8)		
Persistence and degradability	Not rapidly degradable	
Eukalyptol (1.8-Cineol) (470-82-6)		
Persistence and degradability	Not rapidly degradable	
Pinene alpha (80-56-8)		
Persistence and degradability	Not rapidly degradable	

## Safety Data Sheet

Bornan-2-one (76-22-2)	
Persistence and degradability	Not rapidly degradable
Pinene beta (127-91-3)	
Persistence and degradability	Not rapidly degradable
Camphene (79-92-5)	
Persistence and degradability	Not rapidly degradable
Caryophyllene beta (87-44-5)	
Persistence and degradability	Not rapidly degradable
p-Cymene (99-87-6)	
Persistence and degradability	Not rapidly degradable
4-Carvomenthenol (562-74-3)	
Persistence and degradability	Not rapidly degradable
Lindenol (IFF) (98-55-5)	
Persistence and degradability	Not rapidly degradable
delta-3-carene (13466-78-9)	
Persistence and degradability	Not rapidly degradable
Myrcene (123-35-3)	
Persistence and degradability	Not rapidly degradable
gamma Terpinene (99-85-4)	
Persistence and degradability	Not rapidly degradable
Limonene D- (nat) (5989-27-5)	
Persistence and degradability	Not rapidly degradable
Terpinene alpha (99-86-5)	
Persistence and degradability	Not rapidly degradable
Linalool (78-70-6)	
Persistence and degradability	Not rapidly degradable
Terpinolene (586-62-9)	
Persistence and degradability	Not rapidly degradable
Oct-1-ene-3-ol (3391-86-4)	
Persistence and degradability	Not rapidly degradable
12.3. Bioaccumulative potential	
Lindenol (IFF) (98-55-5)	
Partition coefficient n-octanol/water (Log Kow)	≥ 2.67
Linalool (78-70-6)	
Partition coefficient n-octanol/water (Log Pow)	≥ 2.84

#### Safety Data Sheet

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

#### 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

No additional information available

#### **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Regional waste regulation

Waste treatment methods

Sewage disposal recommendations

Product/Packaging disposal recommendations

Additional information

: Disposal must be done according to official regulations.

: Dispose of contents/container in accordance with licensed collector's sorting instructions.

: Disposal must be done according to official regulations.

: Disposal must be done according to official regulations.

: Flammable vapours may accumulate in the container. Do not re-use empty containers.

#### **SECTION 14: Transport information**

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID n	14.1. UN number or ID number			
UN 1197	UN 1197	UN 1197	UN 1197	UN 1197
14.2. UN proper shippin	g name			
EXTRACTS, LIQUID (EO Rosemary CT cineol (org))	EXTRACTS, LIQUID (EO Rosemary CT cineol (org))	Extracts, liquid (EO Rosemary CT cineol (org))	EXTRACTS, LIQUID (EO Rosemary CT cineol (org))	EXTRACTS, LIQUID (EO Rosemary CT cineol (org))
Transport document descr	iption			
UN 1197 EXTRACTS, LIQUID (EO Rosemary CT cineol (org)), 3, III, (D/E), ENVIRONMENTALLY HAZARDOUS	UN 1197 EXTRACTS, LIQUID (EO Rosemary CT cineol (org)), 3, III, MARINE POLLUTANT/ENVIRONME NTALLY HAZARDOUS	UN 1197 Extracts, liquid (EO Rosemary CT cineol (org)), 3, III, ENVIRONMENTALLY HAZARDOUS	UN 1197 EXTRACTS, LIQUID (EO Rosemary CT cineol (org)), 3, III, ENVIRONMENTALLY HAZARDOUS	UN 1197 EXTRACTS, LIQUID (EO Rosemary CT cineol (org)), 3, III, ENVIRONMENTALLY HAZARDOUS
14.3. Transport hazard o	class(es)			
3	3	3	3	3
3	3	3	3	3
14.4. Packing group	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	Dangerous for the environment: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes

#### Safety Data Sheet

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

ADR	IMDG	IATA	ADN	RID
No supplementary information available				

#### 14.6. Special precautions for user

#### **Overland transport**

Classification code (ADR) : F1
Special provisions (ADR) : 601
Limited quantities (ADR) : 5I
Excepted quantities (ADR) : E1

Packing instructions (ADR) : P001, IBC03, LP01, R001

Mixed packing provisions (ADR) : MP19
Portable tank and bulk container instructions (ADR) : T2
Portable tank and bulk container special provisions : TP1

(ADR)

Tank code (ADR) : LGBF
Vehicle for tank carriage : FL
Transport category (ADR) : 3
Special provisions for carriage - Packages (ADR) : V12
Special provisions for carriage - Operation (ADR) : S2
Hazard identification number (Kemler No.) : 30

Orange plates :

30 1197

Tunnel restriction code (ADR) : D/E

#### Transport by sea

Special provisions (IMDG) : 223.955 Limited quantities (IMDG) : 5 L Excepted quantities (IMDG) : E1 Packing instructions (IMDG) : P001, LP01 IBC packing instructions (IMDG) IBC03 Tank instructions (IMDG) T2 Tank special provisions (IMDG) TP1 EmS-No. (Fire) : F-E : S-D EmS-No. (Spillage) Stowage category (IMDG) Α

Properties and observations (IMDG) : Usually consist of alcoholic solutions. Miscibility with water depends upon the composition.

#### Air transport

PCA Excepted quantities (IATA) : E1 : Y344 PCA Limited quantities (IATA) PCA limited quantity max net quantity (IATA) 10L PCA packing instructions (IATA) : 355 PCA max net quantity (IATA) : 60L CAO packing instructions (IATA) : 366 CAO max net quantity (IATA) : 220L Special provisions (IATA) : A3 ERG code (IATA) : 3L

#### Inland waterway transport

Classification code (ADN) : F1

Special provisions (ADN) : 601

Limited quantities (ADN) : 5 L

Excepted quantities (ADN) : E1

Equipment required (ADN) : PP, EX, A

Ventilation (ADN) : VE01

Number of blue cones/lights (ADN) : 0

#### Rail transport

Classification code (RID) : F1

1/31/2024 (Issue date) EU - en 15/19

#### Safety Data Sheet

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

Special provisions (RID): 601Limited quantities (RID): 5LExcepted quantities (RID): E1

Packing instructions (RID) : P001, IBC03, LP01, R001

Mixed packing provisions (RID) : MP19
Portable tank and bulk container instructions (RID) : T2
Portable tank and bulk container special provisions : TP1

(RID)

Tank codes for RID tanks (RID) : LGBF
Transport category (RID) : 3
Special provisions for carriage – Packages (RID) : W12
Colis express (express parcels) (RID) : CE4
Hazard identification number (RID) : 30

#### 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 (F	EU restriction list (REACH Annex XVII)		
Reference code	Applicable on	Entry title or description	
3(a)	EO Rosemary CT cineol (org); Eukalyptol (1.8- Cineol); Pinene beta; p- Cymene; delta-3-carene; Myrcene; gamma Terpinene; Limonene D- (nat); Terpinene alpha	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)	EO Rosemary CT cineol (org); Eukalyptol (1.8-Cineol); Pinene alpha; Pinene beta; Caryophyllene beta; p-Cymene; 4-Carvomenthenol; Lindenol (IFF); delta-3-carene; Myrcene; gamma Terpinene; Limonene D- (nat); Terpinene alpha; Linalool; Terpinolene; Oct-1-ene-3-ol	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	
3(c)	EO Rosemary CT cineol (org); Caryophyllene beta; p-Cymene; 4-Carvomenthenol; Myrcene; gamma Terpinene; Limonene D-(nat); Terpinolene; Oct-1-ene-3-ol	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	

#### Safety Data Sheet

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

EU restriction list (REACH Annex XVII)		
Reference code	Applicable on	Entry title or description
40.	EO Rosemary CT cineol (org); Eukalyptol (1.8- Cineol); Bornan-2-one; Pinene beta; Camphene; p-Cymene; delta-3- carene; Myrcene; gamma Terpinene; Limonene D- (nat); Terpinene alpha	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)**

Not listed on REACH Annex XIV (Authorisation List)

#### **REACH Candidate List (SVHC)**

Not listed on the REACH Candidate List

#### **PIC Regulation (Prior Informed Consent)**

Not listed on the PIC list (Regulation EU 649/2012)

#### **POP Regulation (Persistent Organic Pollutants)**

Not listed on the POP list (Regulation EU 2019/1021)

#### Ozone Regulation (1005/2009)

Not listed on the Ozone Depletion list (Regulation EU 1005/2009)

#### **Dual-Use Regulation (428/2009)**

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

#### **Explosives Precursors Regulation (2019/1148)**

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

#### **Drug Precursors Regulation (273/2004)**

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

#### 15.1.2. National regulations

#### **Netherlands**

SZW-lijst van kankerverwekkende stoffen : EO Rosemary CT cineol (org) is listed SZW-lijst van mutagene stoffen : EO Rosemary CT cineol (org) is listed

SZW-lijst van reprotoxische stoffen – Borstvoeding : The substance is not listed SZW-lijst van reprotoxische stoffen – : The substance is not listed

Vruchtbaarheid

SZW-lijst van reprotoxische stoffen – Ontwikkeling : The substance is not listed

#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

### **SECTION 16: Other information**

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor

## Safety Data Sheet

Abbreviations and acronyms:		
BLV	Biological limit value	
BOD	Biochemical oxygen demand (BOD)	
COD	Chemical oxygen demand (COD)	
DMEL	Derived Minimal Effect level	
DNEL	Derived-No Effect Level	
EC-No.	European Community number	
EC50	Median effective concentration	
EN	European Standard	
IARC	International Agency for Research on Cancer	
IATA	International Air Transport Association	
IMDG	International Maritime Dangerous Goods	
LC50	Median lethal concentration	
LD50	Median lethal dose	
LOAEL	Lowest Observed Adverse Effect Level	
NOAEC	No-Observed Adverse Effect Concentration	
NOAEL	No-Observed Adverse Effect Level	
NOEC	No-Observed Effect Concentration	
OECD	Organisation for Economic Co-operation and Development	
OEL	Occupational Exposure Limit	
PBT	Persistent Bioaccumulative Toxic	
PNEC	Predicted No-Effect Concentration	
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail	
SDS	Safety Data Sheet	
STP	Sewage treatment plant	
ThOD	Theoretical oxygen demand (ThOD)	
TLM	Median Tolerance Limit	
VOC	Volatile Organic Compounds	
CAS-No.	Chemical Abstract Service number	
N.O.S.	Not Otherwise Specified	
vPvB	Very Persistent and Very Bioaccumulative	
ED	Endocrine disrupting properties	

Full text of H- and EUH-statements:	
Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2

### Safety Data Sheet

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

Full text of H- and EUH-statements:		
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3	
Asp. Tox. 1	Aspiration hazard, Category 1	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
Flam. Liq. 3	Flammable liquids, Category 3	
Flam. Sol. 1	Flammable solids, Category 1	
Flam. Sol. 2	Flammable solids, Category 2	
H226	Flammable liquid and vapour.	
H228	Flammable solid.	
H302	Harmful if swallowed.	
H304	May be fatal if swallowed and enters airways.	
H315	Causes skin irritation.	
H317	May cause an allergic skin reaction.	
H319	Causes serious eye irritation.	
H331	Toxic if inhaled.	
H332	Harmful if inhaled.	
H361	Suspected of damaging fertility or the unborn child.	
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.	
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 2	Specific target organ toxicity – Single exposure, Category 2	

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.