Cypress (Provence) Organic Essential Oil, France

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 6/25/2019 Revision date: 3/22/2023 Supersedes version of: 4/22/2020 Version: 3.0

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

1.1. Product identifier

Product form	: Substance
Substance name	: Cypress (Provence) Organic Essential Oil, France
EC-No.	: 283-626-9
CAS-No.	: 84696-07-1
Product code	: 21619_FRA
Type of product	: Essential oil
Product group	: Raw material

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

1.2.1. Relevant identified uses

Main use category : Industrial use,Professional use

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

SIRIUS SAS
57 Chemin de la Métairie Haute
81580 CAMBOUNET SUR LE SOR
France
T + 33 (0)5-32-09-11-72
contact@sirius-bio.com

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 1	H317
Hazardous to the aquatic environment – Acute Hazard, Category 1	H400
Hazardous to the aquatic environment – Chronic Hazard, Category 1	H410

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

Adverse physicochemical, human health and environmental effects

Flammable liquid and vapour. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Very toxic to aquatic life with long lasting effects.

2.2. Label elements

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

Hazard pictograms (CLP) :

GHS02 GHS07 GHS09

Signal word (CLP) : Warning

Hazard statements (CLP) : H226 - Flammable liquid and vapour.
H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation.
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.
P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 - Wash hands, forearms and face thoroughly after handling.
P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

P321 - Specific treatment (see supplemental first aid instruction on this label).
P391 - Collect spillage.

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

SECTION 3: Composition/information on ingredients
3.1. Substances
Name : Cypress (Provence) Organic Essential Oil, France
CAS-No. : 84696-07-1
EC-No. : 283-626-9

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Alpha pinene	CAS-No.: 80-56-8 EC-No.: 201-291-9 REACH-no: 01-2119519223-49	25 – 80	Asp. Tox. 1, H304 Acute Tox. 4 (Oral), H302 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1B, H317
Delta 3-carene	CAS-No.: 13466-78-9 EC-No.: 236-719-3	10 – 50	Skin Sens. 1, H317 Skin Irrit. 2, H315 Flam. Liq. 3, H226 Asp. Tox. 1, H304 Acute Tox. 4 (Inhalation), H332 Aquatic Chronic 2, H411
Cedrol	CAS-No.: 77-53-2 EC-No.: 201-035-6	0.1 – 10	Aquatic Chronic 2, H411
Terpinolene	CAS-No.: 586-62-9 EC-No.: 209-578-0	1 – 10	Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 Skin Sens. 1B, H317
Limonene	CAS-No.: 138-86-3 EC-No.: 227-813-5 EC Index-No.: 601-096-00-2 REACH-no: 01-2119529223-47	1 – 10	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 3, H412
Alpha terpineol	CAS-No.: 98-55-5 EC-No.: 202-680-6	0.1 – 5	Skin Irrit. 2, H315 Eye Irrit. 2, H319
Terpenyl acetate	CAS-No.: 80-26-2 EC-No.: 201-265-7	1 – 5	Aquatic Chronic 2, H411
Myrcene	CAS-No.: 123-35-3 EC-No.: 204-622-5	1 – 5	Asp. Tox. 1, H304 Eye Irrit. 2, H319 Aquatic Acute 1, H400 Aquatic Chronic 2, H411 Flam. Liq. 3, H226 Skin Irrit. 2, H315
Beta Pinene	CAS-No.: 127-91-3 EC-No.: 204-872-5	0.1 – 5	Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1B, H317
Sabinene	CAS-No.: 3387-41-5 EC-No.: 222-212-4	0.1 – 5	Acute Tox. 4 (Oral), H302
Terpinen-4-ol	CAS-No.: 562-74-3 EC-No.: 209-235-5	0.1 – 5	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319

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	< 5	Skin Sens. 1B, H317
Alpha cedrene	CAS-No.: 469-61-4 EC-No.: 207-418-4	0.1 – 5	Not classified
Paracymene	CAS-No.: 99-87-6 EC-No.: 202-796-7 EC Index-No.: 601-094-00-1	0.1 – 5	Repr. 2, H361 Flam. Liq. 3, H226 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 Acute Tox. 3 (Inhalation), H331
Gamma terpinene	CAS-No.: 99-85-4 EC-No.: 202-794-6	0.1 – 5	Repr. 2, H361 Flam. Liq. 3, H226 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
Beta Caryophyllene	CAS-No.: 87-44-5 EC-No.: 201-746-1	< 5	Skin Sens. 1B, H317 Asp. Tox. 1, H304
Borneol	CAS-No.: 507-70-0 EC-No.: 208-080-0	< 5	Skin Irrit. 2, H315 Flam. Sol. 1, H228 Aquatic Chronic 2, H411
Alpha terpinene	CAS-No.: 99-86-5 EC-No.: 202-795-1	< 1	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Skin Sens. 1, H317 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
Beta Phellandrene	CAS-No.: 555-10-2 EC-No.: 209-081-9	< 1	Asp. Tox. 1, H304 Flam. Liq. 3, H226
1,8 Cineole	CAS-No.: 470-82-6 EC-No.: 207-431-5	< 1	Flam. Liq. 3, H226 Skin Sens. 1B, H317 Eye Irrit. 2, H319
Camphene	CAS-No.: 79-92-5 EC-No.: 201-234-8	< 1	Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Alpha Phellandrene	CAS-No.: 99-83-2 EC-No.: 202-792-5	< 1	Flam. Liq. 3, H226 Asp. Tox. 1, H304 Aquatic Chronic 1, H410 Aquatic Acute 1, H400
Camphor	CAS-No.: 76-22-2 EC-No.: 200-945-0	< 1	STOT SE 2, H371 Skin Irrit. 2, H315 Flam. Sol. 2, H228 Eye Dam. 1, H318 Aquatic Chronic 2, H411 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332
Nonanone 2	CAS-No.: 821-55-6 EC-No.: 212-480-0	< 1	Skin Irrit. 2, H315 Eye Irrit. 2, H319

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

3.2. Mixtures

Not established.

SECTION 4: First aid measures

4.1. Description of first aid measures

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 : Call a poison center or a doctor if you feel unwell.

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

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

Symptoms/effects after eye contact : Eye irritation.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

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

5.2. Special hazards arising from the substance or mixture

Fire hazard : Flammable liquid and vapour.

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

5.3. Advice for firefighters

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

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

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. 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

Precautions for safe handling : 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. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray.

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

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ground/bond container and receiving equipment.

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

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Camphor (76-22-2)	
France - Occupational Exposure Limits	
Local name	Camphre
VME (OEL TWA)	12 mg/m³
VME (OEL TWA) [ppm]	2 ppm

Camphor (76-22-2)	
Remark	Valeurs recommandées/admises
Regulatory reference	Circulaire du Ministère du travail (réf.: INRS ED 984, 2016)

8.1.2. Recommended monitoring procedures
No additional information available

8.1.3. Air contaminants formed
No additional information available

8.1.4. DNEL and PNEC
No additional information available

8.1.5. Control banding
No additional information available

8.2. Exposure controls

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

8.2.2. Personal protection equipment
Personal protective equipment:
Gloves. Safety glasses. Protective clothing.

Personal protective equipment symbol(s):

8.2.2.1. Eye and face protection
Eye protection:
Safety glasses

8.2.2.2. Skin protection
Skin and body protection:
Wear suitable protective clothing

Hand protection:
Protective gloves

8.2.2.3. Respiratory protection
Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment

8.2.2.4. Thermal hazards
No additional information available

8.2.3. Environmental exposure controls
Environmental exposure controls:
Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Pale yellow. orange.
Appearance	: Clear.
Odour	: Turpentine like, then woody and amber.
Odour threshold	: Not available
Melting point	: Not applicable
Freezing point	: Not available
Boiling point	: Not available

Flammability	: Flammable liquid and vapour.
Explosive limits	: Not available
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: 35 °C
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: Not available
Viscosity, kinematic	: Not available
Solubility	: Not available
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: Not available
Relative density	: 0.863 – 0.885
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

Refractive index : 1.468 – 1.478

SECTION 10: Stability and reactivity

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

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

1,8 Cineole (470-82-6)	
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))

Alpha pinene (80-56-8)	
LD50 oral	3700 mg/kg bodyweight
LD50 dermal	> 5000 mg/kg bodyweight

Alpha terpinene (99-86-5)	
LD50 oral	1680 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

Alpha terpineol (98-55-5)	
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LD50 dermal rabbit	> 3000 mg/kg OECD 402

Beta Pinene (127-91-3)	
LD50 oral rat	300 – 2000 mg/kg OCDE 423
LD50 dermal rat	> 2000 mg/kg

Borneol (507-70-0)	
LD50 oral	2500 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 rat	> 2500 mg/kg bodyweight Animal:
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit
LC50 Inhalation - Rat	> 25 mg/l air Animal:

Camphor (76-22-2)	
LD50 oral	1500 mg/kg bodyweight
LC50 Inhalation - Rat	0.5 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)
LC50 Inhalation - Rat (Dust/Mist)	1.5 mg/l/4h

Delta 3-carene (13466-78-9)	
LD50 oral	4800 mg/kg bodyweight
LC50 Inhalation - Rat (Dust/Mist)	1.5 mg/l/4h

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 bodyweight
LD50 dermal rabbit	5610 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), 95% CL: 3578 - 8374
LD50 dermal	5610 mg/kg bodyweight

Gamma terpinene (99-85-4)	
LD50 oral	3650 mg/kg bodyweight

Limonene (138-86-3)	
LD50 oral	4400 mg/kg bodyweight
LD50 dermal rabbit	5000 mg/kg Source: National Library of Medicine/Hazardous Substances Data Bank
LD50 dermal	> 2000 mg/kg bodyweight

Paracymene (99-87-6)	
LD50 oral	4750 mg/kg bodyweight
LC50 Inhalation - Rat (Vapours)	9.7 mg/l/4h

Terpinolene (586-62-9)	
LD50 oral	3775 mg/kg bodyweight
LD50 dermal rabbit	> 4300 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)

Skin corrosion/irritation : Causes skin irritation.

Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitisation : May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Alpha terpineol (98-55-5)	
NOAEL (animal/male, F0/P)	≥ 750 mg/kg OECD 422
NOAEL (animal/female, F0/P)	≥ 750 mg/kg OECD 422

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

Camphor (76-22-2)	
STOT-single exposure	May cause damage to organs.

STOT-repeated exposure : Not classified

1,8 Cineole (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)

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)

Camphor (76-22-2)	
NOAEL (dermal, rat/rabbit, 90 days)	250 mg/kg bodyweight Animal: rat, Guideline: other:Food and Drug Administration (FDA) Good Laboratory Practice Regulations for Nonclinical Studies (GLP Guidelines)

Linalool * (78-70-6)	
LOAEL (dermal, rat/rabbit, 90 days)	Animal: rat, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)

Aspiration hazard : Not classified

Linalool * (78-70-6)	
Viscosity, kinematic	5.192 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 (acute) : Very toxic to aquatic life.

Hazardous to the aquatic environment, long–term (chronic) : Very toxic to aquatic life with long lasting effects.

Not rapidly degradable

1,8 Cineole (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)

Alpha pinene (80-56-8)	
LC50 - Fish [1]	0.28 mg/l
EC50 - Other aquatic organisms [1]	1.44 mg/l waterflea

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)

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)

Camphor (76-22-2)	
LC50 - Fish [1]	35 – 50 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
LC50 - Fish [2]	110 mg/l Test organisms (species): Pimephales promelas
EC50 96h - Algae [1]	6.951 mg/l Test organisms (species):

Linalool * (78-70-6)	
LC50 - Fish [1]	27.8 mg/l
EC50 - Crustacea [1]	59 mg/l Test organisms (species): Daphnia magna
EC50 - Other aquatic organisms [1]	20 mg/l waterflea
EC50 - Other aquatic organisms [2]	88.3 mg/l
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)

Limonene (138-86-3)	
LC50 - Fish [1]	0.72 mg/l
EC50 - Crustacea [1]	17 mg/l Source: The ECOTOXicology database
EC50 - Other aquatic organisms [1]	0.36 mg/l waterflea
EC50 96h - Algae [1]	0.212 mg/l Source: Ecological Structure Activity Relationships

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)

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

Alpha pinene (80-56-8)	
Partition coefficient n-octanol/water (Log Pow)	4.32

Linalool * (78-70-6)	
Partition coefficient n-octanol/water (Log Pow)	2.84

Limonene (138-86-3)	
Partition coefficient n-octanol/water (Log Pow)	4.38

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

Additional information : Flammable vapours may accumulate in the container.

SECTION 14: Transport information
In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
UN 1197	UN 1197	UN 1197	UN 1197	UN 1197
14.2. UN proper shipping name				
EXTRACTS, FLAVOURING, LIQUID	EXTRACTS, FLAVOURING, LIQUID	Extracts, flavouring, liquid	EXTRACTS, FLAVOURING, LIQUID	EXTRACTS, FLAVOURING, LIQUID
Transport document description				
UN 1197 EXTRACTS, FLAVOURING, LIQUID, 3, III, (D/E), ENVIRONMENTALLY HAZARDOUS	UN 1197 EXTRACTS, FLAVOURING, LIQUID, 3, III, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS	UN 1197 Extracts, flavouring, liquid, 3, III, ENVIRONMENTALLY HAZARDOUS	UN 1197 EXTRACTS, FLAVOURING, LIQUID, 3, III, ENVIRONMENTALLY HAZARDOUS	UN 1197 EXTRACTS, FLAVOURING, LIQUID, 3, III, ENVIRONMENTALLY HAZARDOUS
14.3. Transport hazard class(es)				
3	3	3	3	3
				
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
No supplementary information available				

14.6. Special precautions for user
Overland transport

Classification code (ADR) : F1

Special provisions (ADR) : 601

Limited quantities (ADR) : 5l

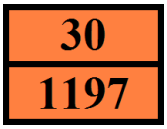
Excepted quantities (ADR) : E1

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 (ADR) : TP1

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	: 
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
EmS-No. (Spillage)	: S-D
Stowage category (IMDG)	: A
Properties and observations (IMDG)	: Usually consist of alcoholic solutions. Miscibility with water depends upon the composition.

Air transport

PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y344
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
Special provisions (RID)	: 601
Limited quantities (RID)	: 5L
Excepted 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 (RID)	: TP1
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 established.

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)
Not listed on REACH Annex XVII

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)

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
No additional information available

15.2. Chemical safety assessment
No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes

Section	Changed item	Change	Comments
	Supersedes	Modified	
	Revision date	Modified	
	Flammability (solid, gas)	Modified	
	Proper Shipping Name (RID)	Modified	
	UN-No. (RID)	Modified	
	Proper Shipping Name (IATA)	Modified	
	Proper Shipping Name (IMDG)	Modified	
1.1	Product code	Modified	
1.1	Name	Modified	
2.2	Precautionary statements (CLP)	Modified	
14.1	UN-No. (ADN)	Modified	
14.1	UN-No. (IATA)	Modified	
14.1	UN-No. (IMDG)	Modified	
14.1	UN-No. (ADR)	Modified	
14.2	Proper Shipping Name (ADN)	Modified	
14.2	Proper Shipping Name (ADR)	Modified	

Indication of changes			
Section	**Changed item**	**Change**	**Comments**
16	Abbreviations and acronyms	Modified	

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
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

Full text of H- and EUH-statements:	
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. 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.
H318	Causes serious eye damage.
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.