



ALTEYA[®]
o r g a n i c s

Alteya's Campus, Village of Yagoda 6167, St.Zagora Region, Bulgaria | +359 700 15 502 | info@alteya.com | AlteyaOrganics.com

MATERIAL SAFETY DATA SHEET

According to Regulation (EC) No 1272 of 2008 and Regulation (EC) No 1907/2006 (REACH),
as amended by Regulation (EU) 2020/878

Organic Cardamom Oil

Version: 1.0: first edition Date of creation: 14.04.2022 Date of printing: 15.04.2022

1. Identification of the substance/mixture and the company/undertaking

1.1. Product Identifiers

Trade name	:	Organic Cardamom Oil
Substance name (INCI)	:	ELETTARIA CARDAMOMUM SEED OIL
Botanical name	:	Elettaria Cardamomum
CAS №	:	8000-66-6 / 85940-32-5
EO №	:	- / 288-922-1
Biological origin	:	Obtained by distillation of the dried unripe fruits of the tropical grass Elettaria cardamomum (L.) Matori var. minuscula Burkill (var. minor Watt) and var. major Thwaites = Elettaria major Smith, the so-called long Ceylon cardamom of the family Zingiberaceae.

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

Use of substance/mixture	:	Used in food industry, medicine, perfumery and cosmetics by itself, or as a formulation constituent, a part of composition.
Recommended restrictions on use	:	Avoid contact with eyes!
Reason not to recommend use:		May cause serious irritation.

1.3. Details of the supplier of the safety data sheet

Manufacturer	:	ALTEYA ORGANICS LLC
Mailing address/Postal code	:	6167, village of Yagoda,1, Rozovarna St.
Country identifier/		



Postal code/city or town : Bulgaria
Telephone/Mobile/Fax : +359 700 15 502
E-mail of the competent person responsible for the Safety Data Sheet : salesbg@alteya.com
National contact person : Kaloyan Stoev

1.4. Emergency telephone number

Clinic of Toxicology at MPHATEM N.I. Pirogov

Emergency telephone number: 02 9154409; (regular working time, Saturdays and Sundays excluded) or 02 9154 346 (24h service, all week)

e-mail: poison_centre@mail.orbitel.bg

<http://www.pirogov.net>

2. Hazards Identification

2.1. Classification of the substance or mixture

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

Classification according to GHS				
Class of hazard	Class of hazard	Class of hazard	Class of hazard	Class of hazard
3.10	Inh.	Aspiration hazard	(Asp Tox 1)	H304
3.2	Skin	Skin irritation	Corrosion/irritation 2	H315
3.4	Sens.	Sensitization - skin	(Skin sens 1)	H317
3.3	Eye	Eye irritation	(Corrosion)Damage/Irritation. 2A	H319
4.1	Chronic	Toxic to aquatic life	Aquatic Chronic 2	H411

2.1.2. Additional information:

For the full text of hazard statements and EU hazard statements: see SECTION 16.

2.2. Label Elements

Labeling according Regulation (EC) No 1272/2008 [CLP]:

Hazard pictograms



GHS08 GHS07 GHS09

Signal word : Hazardous
Hazard statements : 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.
EUH 208 Contains Citral, Geraniol, Linalool, Limonene.
May cause an allergic reaction.



Safety recommendations

Safety recommendations

P102 Keep out of reach of children

Safety recommendations

Prevention

: P261 Avoid breathing vapours
P264 Wash hands 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.
P284 [In case of inadequate ventilation] wear respiratory protection.

Safety recommendations

- As a reaction : P305+P351+ IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P338 IF SWALLOWED: Immediately call a doctor
P301+P310 Do NOT induce vomiting.
P331 IF ON SKIN: Wash with plenty of water/...
P302 + P352 If skin irritation or rash occurs:
P333 + P313 Get medical advice/attention.
P391 Collect spillage.

Safety recommendations

If stored

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

P405 Store locked up

At disposal

: P501 Dispose of contents / container at an approved disposal site in accordance with local and national regulations.

2.3. Other hazards

No other information available.

The substance meets vPvB criteria according to Regulation (EC) No 1907/2006, Annex XIII.

3. Composition/information on ingredients

3.1. Substance

INGREDIENT	IDENTIFIERS	%	CLASSIFICATION
ELETTARIA CARDAMOMUM SEED OIL	EINECS NO: - / 288-922-1 CAS NO: 8000-66-6 /	100,0	



	85940-32-5		DANGER Asp. Tox. 1 H304 Skin Irrit. 2 – H315 Skin Sens. 1B H317 Eye Irrit. 2 - H319 Aquatic Chronic 2 H411
<i>α</i> -PINENE	EINECS NO: 232-077-3 CAS NO: 7785-26-4	0,1 – 2,5	Flam. Liq. 3 H226 Skin Irrit. 2 H315 Skin Sens. 1B H317 Asp. Tox. 1 H304 Aquatic Acute 1 H400 Aquatic Chronic 1 H410
SABINENE	EINECS NO: - CAS NO: 3387-41-5	2,0 – 4,2	(Acute Tox. 4) H302 Flam. Liq. 2 – H225 Mutagen 2: H341
BETA - MYRCENE	EINECS NO: 204-622-5 CAS NO: 123-35-3	0,1 – 2,5	Flam. Liq. 3 - H226 Asp. Tox. 1, H304 Skin Irrit. 2 – H315 Eye Irrit. 2 - H319
<i>Eucalyptol</i> (1,8cineol)	EINECS NO: 207-431-5 CAS NO: 470-82-6;	23,0 – 34,0	Flam. Liq. 3 - H226 Eye Irrit. 2 - H319 Acute Tox.Oral 4 – H302 Skin Irrit. 2 – H315
<i>α</i> - Terpinyl acetate	EINECS NO: 201-265-7 CAS NO: 80-26-2	21,0 – 40,0	Skin Irrit. 2 (H315) Eye Irrit. 2 - H319
<i>γ</i> -Terpinene (GAMMA-TERPINENE)	EINECS NO: 202-794-6 CAS NO: 99-85-4	1,2 – 2,8	Flam. Liq. 3; H226 Repr. 2; H361d Aquatic Chronic 2, H411
<i>Terpinen-4-ol</i>	EINECS NO: 209-235-5 CAS NO: 562-74-3	0,8 – 6,2	Eye Irrit. 2 - H319 Acute Tox.Oral 4 – H302 Skin Irrit. 2 – H315
NEROL	EINECS NO: 203-378-7 CAS NO: 106-25-2	0,6 ≤ 1,6	Skin Irrit. Cat.2, H315 Skin Sens. Cat.1, H317 Eye irritation, Cat. 2; H318 Eye .irrit, Cat. 2A; H319
CITRAL	EINECS NO: 226-394-6 CAS NO: 5392-40-5	0,001 – 0,1	Skin Irrit. 2 – H315 Skin Sens. 1 – H317
GERANIOL	EINECS NO: 203-377-1 CAS NO: 106-24-1	0,1 – 1,1	Skin Irrit. 2 – H315 Skin Sens. Cat.1, H317 Eye irritation, Cat. 2; H318
LINALOOL	EINECS NO: 201-134-4 CAS NO: 78-70-6	0,6 – 1,0	Eye Irrit. 2A (H319) Skin Sens. 1B (H317) Skin Irrit. 2 (H315)
LIMONENE	EINECS NO: 227-813-5 CAS NO: 5989-27-5	0.05 – 0,1	Flam. Liq. 3 – H226 Skin Irrit. 2 – H315 Skin Sens. 1 – H317



			<i>Asp. Tox. 1 - H304</i> <i>Aquatic Acute 1 - H400</i> <i>Aquatic Chronic 1 - H410</i>
--	--	--	---

4. First Aid Measures

4.1. Description of first aid measures



General notes	:	If you feel unwell, seek medical attention (show the label if possible).
Following inhalation	:	Avoid daily inhalation of the product. If breathing is difficult, move the person to fresh air. If symptoms persist, seek medical attention.
Following skin contact	:	Remove contaminated clothing. Wash the affected area with plenty of soap and water.
Following eye contact	:	Immediately rinse with plenty of water, also under the eyelids for at least 15 minutes. If symptoms (irritation, burning) persist, seek medical attention.
Following ingestion	:	Not expected route of exposure. In case of ingestion, if the amount is small, (no more than one mouthful), rinse the mouth with milk or water and consult a doctor. Rinse mouth with water and do not induce vomiting unless directed by medical personnel. Get immediate medical attention and show the label of the substance to medical personnel.

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

Note : For details on health effects and symptoms, see section 11.

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

Treatment : There is no specific treatment. Treat symptomatically.

5. Fire-fighting Measures

5.1. Extinguishing media

Suitable



extinguishing media : CO2, dry chemical, foam

Unsuitable extinguishing media : Strong water jet

5.2. Special hazards arising from the substance or mixture

Specific hazards during fire-fighting : Sealed containers may increase pressure and release combustible materials in the fire.

5.3. Advice for firefighters

Special protective equipment for firefighters : Avoid breathing vapors and fumes formed in case of fire. Use a mask if necessary. In order to extinguish an essential oil fire, use a powder-specific ABC (or equivalent).

Additional information : Use normal firefighting equipment. Wear self-contained breathing apparatus for firefighting if necessary.

6. Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For personnel not responsible for emergencies

Stop the leak if you can do so without risk. Avoid all flammable sources. Ventilate the premises. No smoking. Use personal protective equipment during work. Follow instructions in Sections 7 and 8. Do not inhale aerosols. Avoid contact with skin and eyes.

For the firefighters:

Should be equipped with appropriate personal protective equipment (see Section 8).

High temperature may increase the pressure in the container - cool the container by spraying water. Avoid inhaling the released vapors.

6.1.2. For the persons responsible for emergencies

Personal precautions : Clarify the chemical resistance. Maintain good professional and personal hygiene. Avoid inhalation of product vapors and contact with skin and eyes.

6.2. Environmental precautions



Environmental Precautions : Avoid contamination of sewers, surface and ground water. Throw away rags, sponges, etc. ... used for cleaning according to applicable regulations.

6.3. Methods and materials for containment and cleaning up

6.3.1. For containment : Eliminate all sources of ignition. Clean the affected area. Prevent the liquid from spreading. Contain spilled liquid with inert dust, granular absorbent or earth/sand and remove to a disposal container.

6.3.2. For cleanup : Pump larger quantities. Swab up spills with non-combustible materials (such as detergent - do not use solvents) and transfer to containers. Collect in tightly closed containers and dispose of according to the instructions in Section 13. After removing the product, wash the contaminated area with plenty of water.

6.4. Reference to other sections

See Section 8 and 13.

7. Handling and Storage

7.1. Precautions for safe handling

Precautions : Work in accordance with the rules of occupational hygiene and safety techniques. Avoid unintentional contact with skin surfaces, do not inhale vapors, do not swallow. Prevent access of persons not required and not wearing protective clothing. Do not touch or walk through the product. Wear appropriate respiratory protection if ventilation is inadequate. Follow the hygiene regulations. Always wash hands after work. Remove and wash contaminated clothing before reuse. Make sure there is adequate ventilation, especially in enclosed spaces.

Fire-fighting measures : Keep away from heat. Keep away from sources of ignition.

Measures to avoid transformation into aerosols and powder : Provide good ventilation or exhaust in the workplace.



Hygienic measures : Wash hands before breaks and at the end of the workday.
Avoid contact with eyes and skin.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions : Store in closed glass containers away from heat, light and other sources of ignition at a temperature of 15-25°C. Avoid contact with air. Avoid extreme temperatures. Do not freeze. Store away from oxidizers.

Incompatible materials : No information available

Packing materials : Always store in packaging that allows preserving the integrity and quality of the product.

Storage class : No information

Additional information on storage conditions : No information .

Recommendations for fire and explosion protection : Keep away from sources of ignition and open flame.

Recommendations for primary storage : Apply good occupational practices and occupational hygiene practices by ensuring proper ventilation in the workplace. Observe good personal hygiene and do not eat, drink or smoke at work.

It is recommended to observe the packaging and storage conditions according to ISO/TS 210:2015.

7.3. Specific end use(s)

Recommendations : Read the label before use.

Solutions specific to the industrial sector : No information available.

Specific use(s) : Used in food industry, medicine, perfumery and cosmetics by itself, or as a formulation constituent, a part of composition.



Additional information:

Follow the regulation relative to the application:

- The Therapeutic Products Act, if they are advertised as medicines or medical products (Medicinal effects; Health effects).
- The Food Law and its regulations if they are advertised as a food supplement.
- The cosmetics product regulations if advertised as cosmetics (for instance perfume, highly diluted essential oils for use on the body as massage oils or bath supplements).
- The Animal feed regulation if it is advertised as an animal feed additive.
- The Biocidal products regulation if, for example, they are advertised as insect repellents.
- In all other cases, they are subject to the Chemicals regulation.

8. Exposure controls/Personal protection equipment

8.1. Control parameters

*(R)-p-Mentha-1,8-diene - Index: NA, CAS: 5989-27-5, EC No: 227-813-5
TLV TWA - TLV STEL- VLE 8h- VLE short: None.*

*TERPINEN-4-OL - Index: NA, CAS: 562-74-3, EC No: 209-235-5
TLV TWA - TLV STEL- VLE 8h- VLE short: None.*

Pinene Limit value -8 hours 113 mg/m³ -

Other occupational exposure limit values

Information on monitoring procedures

Relevant DNEL-/DMEL-/PNEC and other threshold levels

***DERIVED NO EFFECT LEVEL (DNEL)OR DERIVED MINIMUM EFFECT LEVEL (DMEL):
LINALOOL(CAS:78-70-6)***

*FINAL USE: WORKERS.
EXPOSURE METHOD: DERMAL CONTACT.
POTENTIAL HEALTH EFFECTS: SHORT TERM SYSTEMIC EFFECTS.
DNEL: 5MG/KG BODY WEIGHT/DAY*

*EXPOSURE METHOD: DERMAL CONTACT.
POTENTIAL HEALTH EFFECTS: SHORT TERM LOCAL EFFECTS.
DNEL: 15MG OF SUBSTANCE/CM²*

EXPOSURE METHOD: DERMAL CONTACT.



POTENTIAL HEALTH EFFECTS: LONG TERM SYSTEMIC EFFECTS.
DNEL: 2.5MG/KGBODY WEIGHT/DAY

EXPOSURE METHOD: DERMAL CONTACT.
POTENTIAL HEALTH EFFECTS: LONG TERM LOCAL EFFECTS.
DNEL: 15MG OF SUBSTANCE/CM²

EXPOSURE METHOD: INHALATION.
POTENTIAL HEALTH EFFECTS: SHORT TERM SYSTEMIC EFFECTS.
DNEL: 16.5MG OF SUBSTANCE/M³

EXPOSURE METHOD: INHALATION.
POTENTIAL HEALTH EFFECTS: LONG TERM SYSTEMIC EFFECTS.
DNEL: 2.8MG OF SUBSTANCE/M³
FINAL USE: CONSUMERS.

EXPOSURE METHOD: INGESTION.
POTENTIAL HEALTH EFFECTS: SHORT TERM SYSTEMIC EFFECTS.
DNEL: 1.2MG/KGBODY WEIGHT/DAY

EXPOSURE METHOD: INGESTION.
POTENTIAL HEALTH EFFECTS: LONG TERM SYSTEMIC EFFECTS.
DNEL: 0.2MG/KG BODY WEIGHT/DAY

EXPOSURE METHOD: DERMAL CONTACT.
POTENTIAL HEALTH EFFECTS: SHORT TERM SYSTEMIC EFFECTS.
DNEL: 2.5MG/KG BODY WEIGHT/DAY

EXPOSURE METHOD: DERMAL CONTACT.
POTENTIAL HEALTH EFFECTS: SHORT TERM LOCAL EFFECTS.
DNEL: 15MG OF SUBSTANCE/CM²

EXPOSURE METHOD: DERMAL CONTACT.
POTENTIAL HEALTH EFFECTS: LONG TERM SYSTEMIC EFFECTS.
DNEL: 1.25MG/KG BODY WEIGHT/DAY

EXPOSURE METHOD: DERMAL CONTACT.
POTENTIAL HEALTH EFFECTS: LONG TERM LOCAL EFFECTS.
DNEL: 15MG OF SUBSTANCE/CM²

EXPOSURE METHOD: INHALATION.
POTENTIAL HEALTH EFFECTS: SHORT TERM SYSTEMIC EFFECTS.
DNEL: 4.1MG OF SUBSTANCE/M³

EXPOSURE METHOD: INHALATION.
POTENTIAL HEALTH EFFECTS: LONG TERM SYSTEMIC EFFECTS.
DNEL: 0.7MG OF SUBSTANCE/M³

PREDICTED NO EFFECT CONCENTRATION (PNEC):
LINALOOL(CAS:78-70-6)



<i>ENVIRONMENTAL COMPARTMENT:</i> <i>PNEC:</i>	<i>SOIL.</i> <i>0.327MG/KG</i>
<i>ENVIRONMENTAL COMPARTMENT:</i> <i>PNEC:</i>	<i>FRESH WATER.</i> <i>0.2MG/L</i>
<i>ENVIRONMENTAL COMPARTMENT:</i> <i>PNEC:</i>	<i>SEA WATER.</i> <i>0.02MG/L</i>
<i>ENVIRONMENTAL COMPARTMENT:</i> <i>PNEC:</i>	<i>INTERMITTENT WASTE WATER.</i> <i>2MG/L</i>
<i>ENVIRONMENTAL COMPARTMENT:</i> <i>PNEC:</i>	<i>FRESH WATER SEDIMENT.</i> <i>2.22MG/KG</i>
<i>ENVIRONMENTAL COMPARTMENT:</i> <i>PNEC:</i>	<i>MARINE SEDIMENT.</i> <i>0.222MG/KG</i>
<i>ENVIRONMENTAL COMPARTMENT:</i> <i>PNEC:</i>	<i>WASTE WATER TREATMENT PLANT.</i> <i>10MG/L</i>

8.2. Exposition controls

8.2.1. Appropriate engineering control

Measures related to the substance/
mixture to prevent exposure during
identified uses:

The description of appropriate exposure control
measures refers to the identified use(s) of the substance
or mixture specified in subsection 1.2.

General room ventilation or local exhaust ventilation is
usually required to comply with the exposure limit(s).



8.2.2. Personal protective equipment:

Use personal protective equipment that is clean and
properly maintained. Store personal protective
equipment in a clean area away from the work area.
Never eat, drink or smoke during use. Remove and
launder contaminated clothing before reuse.

8.2.2.1. Eyes and face protection:

Avoid contact with eyes.

Use eye protection (safety goggles in accordance with
the EN166 standard) designed to protect against liquid
splashes.

8.2.2.2. Skin protection

Hand protection :

Wear suitable protective gloves (resistant to chemical
agents according to standard EN374) in case of
prolonged or repeated skin contact.



		Recommended glove type: nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR) or PVA (polyvinyl alcohol).
Body protection:		Work clothing worn by staff must be washed regularly. After contact with the product, all parts of the body that have been contaminated should be washed.
8.2.2.3. Respiratory tract protection	:	In case of insufficient ventilation, use suitable means of respiratory protection. When vapors / aerosols type A2 are generated
8.2.2.4. Thermal hazards	:	No data available.
8.2.2.5. Other protection	:	Non-slip safety shoes may be worn in case of spills.
Training measures required to avoid exposure	:	Staff training as per internal schedule.
Organization measures to avoid Exposure	:	Staff training
Technical measures to avoid Exposure	:	Staff training

Environmental exposure controls

Basic guidelines	:	Do not wash-off into surface water
------------------	---	------------------------------------

9. Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

State of aggregation	:	clear liquid
Appearance/type	:	Transparent liquid
Colour	:	colorless to pale yellow-greenish
Odour	:	Spicy, sweet-spicy, cineol, warm and pleasant with a balsamic, floral-woody note and a camphoric undertone
Odor threshold	:	No current information
Melting point / freezing point	:	No information



Boiling point or initial boiling point and boiling range	:	No information
Flammability	:	No information
Explosivity	:	No information
Lower and upper explosivity limit	:	No information
Ignition temperature	:	86°C
Boiling point	:	No information
Auto-ignition temperature	:	No information
Decomposition temperature	:	No information
pH	:	No information
Solubility	:	insoluble in (water)
Solubility	:	in alcohol and oils
Miscibility with ethanol, 70 % (volume fraction), at 20 °C	:	It is not necessary to use more than 3 volumes of ethanol, 70% (volume fraction), until obtaining a clear solution (sometimes opalescent) with 1 volume of essential oil /3:1/
Partition coefficient n-octanol/water (logarithmic value)	:	No information
Vapour density	:	~ 0.05 mm Hg at 20 °C
Density and/or relative density	:	No information
Relative vapor density	:	No information
Particle characteristics	:	Not applicable

9.2. Other information

Refraction index : 1.463 - 1.466
at n²⁰/d

Relative density



ALTEYA[®]
o r g a n i c s

Alteya's Campus, Village of Yagoda 6167, St.Zagora Region, Bulgaria | +359 700 15 502 | info@alteya.com | AlteyaOrganics.com

at d^{20} : 0.917 - 0.947
Optical rotation in $^{\circ}$ (20C) : +22 до +44
Acid value, mg KOH/g : до 6,0
Ester value, mg KOH/g : 92 – 150,0

No other information available.

9.2.1. Information related to physical hazard classes

Note : No information

10. Stability and Reactivity

10.1. Reactivity

Note : Stable under recommended storage conditions.

10.2. Chemical stability

Note : Stable under recommended storage conditions

10.3. Possible hazardous reactions

Hazardous reactions : When exposed to high temperatures, the substance may release hazardous decomposition products such as carbon monoxide, carbon dioxide, fumes and nitrogen oxide.

10.4. Conditions to avoid

Conditions to avoid : Keep ignition sources away - do not smoke. Do not store in the immediate vicinity of heat (above 35 $^{\circ}$ C), sparks, open flame. Avoid extreme heat and avoid contact with strong acids, bases or oxidizing agents. To minimize product degradation, avoid prolonged exposure of the material to air.

Thermal decomposition : Toxic fumes may be released at thermal decomposition.

10.5. Incompatible materials

Materials to avoid : Alkali metals, ammonia, oxidizers, peroxides, strong inorganic acids.



10.6. Hazardous decomposition products

Hazardous decomposition products : Thermal decomposition can release/form carbon monoxide (CO) and carbon dioxide (CO₂).

11. Toxicological Information

11.1. Information on toxicological effects

Acute toxicity

ELETTARIA CARDAMOMUM SEED OIL

Oral toxicity (LD₅₀): Oral-rat 5000,00 mg/kg (FCTXAV 12,837,1974)

ELETTARIA CARDAMOMUM SEED OIL

Dermal toxicity (LD₅₀): skin-rabbit >5000,00 mg/kg (FCTXAV 12,837,1974)

ELETTARIA CARDAMOMUM SEED OIL

Assumed value (LD₅₀ or ATE) for acute dermal toxicity: 150 000

NEROL (CAS: 106-25-2)

Oral:LD₅₀ = 4500 mg/kg

GERANIOL (CAS: 106-24-1)

Oral: LD₅₀ = 4200 mg/kg

LINALOOL(CAS:78-70-6)

ORAL ROUTE: LD₅₀=2200MG/KG

SPECIES: MOUSE

OECDGUIDELINE 401(ACUTE ORAL TOXICITY)

D-LIMONENE(CAS:5989-27-5)

ORAL ROUTE: LD₅₀= 4,400 - 5,10MG/KG

SPECIES : Rat

CITRAL 5392-40-5

LD₅₀ Oral-rat - male and female - 6.800 mg/kg

Aspiration: No information

LD₅₀ Skin - Rat - male and female - > 2.000 mg/kg

Corrosion/Skin irritation

D-LIMONENE(CAS:5989-27-5)

ORAL ROUTE: LD₅₀= > 5000MG/KG

SPECIES : Rabbit



D-LIMONENE(CAS:5989-27-5)

ORAL ROUTE: LD50= > 5,600 - 6000MG/KG

SPECIES : Mouse

LINALOOL(CAS:78-70-6)

Dermal Route:Ld50=5610mg/Kg

Species: Rabbit, Oecdguideline 402(Acute Dermal Toxicity)

LINALOOL(CAS:78-70-6)

Irritation:Average Score =1.85

Effect Observed : Erythema Score, Species : Rabbit

Duration Of Exposure : 24hoecdguideline 404 (Acute Dermal Irritation /Corrosion)

GERANIOL 106-24-1

LD50 Oral - Rat - 3.600 mg/kg

Notes: Behavioral: somnolence (generally suppressed activity). Behavioral: coma. Skin and skin appendages: other: hair.

GERANIOL 106-24-1

LD50 Skin - Rabbit - > 5.000 mg/kg

Corrosion/Skin irritation

Skin - Rabbit, Result: Irritates skin. - 24 h (OECD Test guidelines 404)

GERANIOL 106-24-1

Eyes – Rabbit

Result: Risk of serious damage to eyes. - 24 h

(Regulation 67/548/EEC, Addition V, B.5.)

GERANIOL 106-24-1

- Guinea pig possible sensitization by skin contact

Notes : Causes skin irritation.

Classified on the basis of the rules of the CLP regulation for the classification of mixtures, but not corrosive based on an in vitro skin corrosion test (OECD 431, GLP, rel.1, S).- ECHA

Serious damage/eye irritation

Linalool(Cas:78-70-6)

Corneal Haze: Average Score =1

Species : Rabbit

Duration Of Exposure : 24hoecdguideline 405 (Acute Eye Irritation /Corrosion)

Iritis: Average Score =0.6

Species : Rabbit

Duration Of Exposure : 24hoecdguideline 405(Acute Eye Irritation /Corrosion)



Conjunctival Redness: Average Score =2.3
Species : Rabbit
Duration Of Exposure : 24hoecdguideline 405(Acute Eye Irritation /Corrosion)

CITRAL 5392-40-5
Serious eye damage/Eye irritation
Eyes – Rabbit
Result: Causes serious eye irritation. (OECD Test guidelines 405)

Result : Serious eye damage.
May have irreversible effects on the eyes, such as damage of eye tissues or serious physical vision deterioration that is not fully reversible by the end of the 21-day observation. Serious eye damage is characterized by corneal destruction, permanent corneal opacity and iritis.

Notes : Causes serious eye irritation.
A quick rinse and removal of the substance will avoid damage.

Respiratory or skin sensitization

CITRAL 5392-40-5
Maximization test - Guinea pig
Result: positive
(OECD Test guidelines 406)
Notes: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Note : May cause an allergic skin reaction. Inhalation of high vapor concentrations may cause an anesthetic effect.
Skin Sensitization: Skin sensitizer based on the presence of classified ingredients.

Ingestion

Note : no data

Mutagenicity of germ cells

Note : no data

Carcinogenicity



Note : CAS 5989-27-5: IARC group 3: The agent cannot be classified as to its carcinogenicity to humans.

Summary of the assessment of CMR properties

Note : no data

STOT (specific target organ toxicity) — single exposure

Note : No data

STOT (specific target organ toxicity) — repeated exposure

Note : No data

Aspiration hazard

Note : Breathing high vapor concentrations may cause anesthetic effects. May be fatal if swallowed and enters the respiratory tract.

Information on possible routes of exposure

Note : Contact with the skin, scalp

Symptoms related to physical, chemical and toxicological characteristics

Note : Toxicological characteristics are not comprehensively studied

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Note : Eye irritation upon exposure. Redness of the skin at irritation.

Interactions

Note : Toxicological characteristics are not comprehensively studied

Lack of specific data

Note : Toxicological characteristics are not comprehensively studied



Mixtures

Note : Toxicological characteristics are not comprehensively studied

Medical considerations

Note : Individuals with a rash are referred to a skin specialist for a testing of allergic eczema. Avoid use at young children due to high 1,8-cineole content. According to Tisserand & Young, oils with high 1,8 cineole content can cause CNS and respiratory problems with young children. Do not apply on or near the face of infants or children. Dilute before use. A sensitive skin test should be done before use.

Other information

CITRAL 5392-40-5

Repeated dose toxicity - Rat - female - Oral - The level of harmful effects has not been sufficiently studied - 335 mg/kg

CITRAL 5392-40-5

Cough, Shortness of breath, Headache, Nausea, Vomiting

CITRAL 5392-40-5

Systemic reactions: When absorbed: Drowsiness

Note : Despite our best knowledge, the chemical, physical and toxicological properties have not been studied in depth.

11.2. Properties disturbing the functions of the endocrine system

Note : No information available

12. Ecological information

Note : Do not allow to enter drains, water or soil.

12.1. Toxicity

According to Regulation (EC) No. 1272/2008

H411 Toxic to aquatic life with long lasting effects.

Product:

Acute (short-term) toxicity:



Fish

CITRAL 5392-40-5h

Toxic for fish static test LC50 - Leuciscus idus - 6,78 mg/l - 96h(DIN 38412)

GERANIOL 106-24-1

*static test LC50 - Danio rerio (barbus) - approximately 22 mg/l - 96 h
(OECD Test guidelines 203)*

LINALOOL(CAS:78-70-6)

Fish toxicity: duration of exposure :96h

Lc50=27.8mg/l

Species :oncorhynchus mykiss

Oecdguideline 203(fish,acute toxicity test)

Toxic for Daphnia and other aquatic invertebrates

CITRAL 5392-40-5

static test EC50 - Daphnia magna (Daphnia) - 6,8 mg/l - 48 h Notes: (ECHA)

GERANIOL 106-24-1

*Immobilization EC50 - Daphnia magna (Daphnia) - 10,8 mg/l - 48 h
(OECD Test guideline 202)*

LINALOOL(CAS:78-70-6)

Crustacean Toxicity Duration Of Exposure :48h

Ec50=59mg/L

Species :Daphnia Magna

Oecdguideline 202 (Daphnia Sp.Acute)

Algae/aquatic plants

CITRAL 5392-40-5

static test EC50 - Desmodesmus subspicatus (green algae) - 103,8 mg/l - 72 h

GERANIOL 106-24-1

Growth retardation EC50 - Desmodesmus subspicatus (green algae) - 13,1 mg/l - 72 h

LINALOOL(CAS:78-70-6)

Immobilisation Test

Algae Toxicity: Duration Of Exposure :96h

Ecr50=88.3mg/L

Species :Desmodesmus Subspicatus Other Guideline

Bacteria



CITRAL 5392-40-5

EC50 - Pseudomonas putida (A rod-shaped gram-negative bacterium) - 2.100 mg/l - 30 min

Notes: (External Material Safety Data Sheet)

Chronic (long-term) toxicity:

Note : No data

Fish

Note : No data

Shellfish

Note : No data

Algae/aquatic plants

Note : No data

Other organisms

Note : No data

12.2. Persistence and degradability

Product:

Abiotic degradation

Mixture components degradation

DL- α -pinene 80-56-8

oxygen depletion 68 % - 28 d

Physical and photo-chemical elimination

Note : no data

Biochemical degradation

Note : Biodegradation is expected

12.3. Bioaccumulation



Product: no data available

Bioaccumulation of the mixture components:

DL- α -pinene 80-56-8 *Log KOW 4,83*
DL-lemon 138-86-3 *Log KOW 4,57*
Linalool - *Log KOW 2,9 (pH value: 7, 20 °C)*

Bioconcentration factor (BCF)

Notes : Not accumulated in the biological environment

12.4. Mobility in soil

Product:

Known or predicted distribution in environmental components

Note : no data

Surface tension

Note : No data

Adsorption/desorption

Note : no data

12.5. Results of PBT and vPvB assessment

This product doesn't contain substances considered persistent, bioaccumulative, nor toxic PBT.

Product:

Results from PBT and vPvB assessment

Notes : No information available

12.1. Other adverse effects

Product:

Biochemical oxygen demand (BOD)

Value : No information available

Chemical oxygen demand (BOD)

Value : No information available



Additional ecological information/ Mobility in soil

Notes : No information available

12.6. Additional information

Notes : Do not allow Products to enter streams, drains or other waterways.

13. Disposal Considerations

13.1. Waste treatment methods

13.1.1. Disposal of product/packing

Codes/designation of waste according to LoW: -

Product : Dispose of in accordance with local and national requirements.

Contaminated packaging material : Contaminated packaging must be treated like the substance. Waste products should be treated in accordance with current local, national and European legislation.

European Catalogue waste number : No waste code can be given to this product according to the European Waste Catalogue since it is related to its potential use. Waste code is given after consulting the regional waste Service.

13.1.2. Information on waste treatment : Contact a licensed professional for disposal of this material.

13.1.3. Information on discharge in sewer systems : Do not allow the Product to fall into streams, canals or other waterways.

14. Information on transportation



Transport icon : **Class: 9 Miscellaneous dangerous substances and articles**

14.1. UN proper shipping name

3082

14.2. UN proper shipping name



3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, O.V.O.

14.3. Transport hazard class(es)

Class 9, Pack,gr.III

14.4. Environmental hazards



14.5. Special precautions for user

Not applicable

14.6. Transport in bulk according to Annex II to MARPOL and IBC Code“

Road transport

ADR *Class 9, packing group III, UN 3082*

RID *Class 9, packing group III, UN 3082*

Tunnel code *A, B, C, D*

Waterway transport

ADN *Class 9, packing group III, UN 3082*

Maritime transport

IMDG *Class 9, packing group III, UN 3082*

Marine pollutant *Yes*

Air transport

IATA/CAO *Class 9, packing group III, UN 3082*



15. Regulatory information

15.1. Legislation specific for the substance or mixture / safety, health and environmental regulations

Other regulations / Laws : This safety data sheet is consistent with the Law on Protection from Harmful Effects of chemical Substances and Preparations and the Ordinance on the Classification, Packaging and Labelling

EU legislative acts : accordingly, EU regulations.

Other legal acts, restrictions and prohibitive standards : No information available

15.2. Chemical Safety Assessment

No information.
The supplier has not prepared a chemical safety assessment for this substance/mixture.

16. Other information

Shelf life : 30 month from the date of manufacture.

Classification and procedure used to obtain the classification of mixtures according to Regulation (EC) No 1272/2008 [CLP]

Abbreviations and acronyms:

Abbr.	Description of used abbreviations
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement on the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement on the International Carriage of Dangerous Goods by Road)
Asp Tox 1	Aspiration hazard
Aquatic Chronic 2	dangerous for the aquatic environment - chronic danger
BCF	bioconcentration factor
BOD	Biochemical Oxygen Demand
CAS	Chemical Abstracts Service (prepares the most comprehensive list of chemicals)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (Classification, Labelling and Packaging)
CMR	Carcinogenic, mutagenic and toxic for reproduction (substance)
COD	Chemical oxygen demand



DGR	Dangerous Goods Regulations (see IATA/DGR))
DMEL	Derived Minimal Effect Level
DNEL	Derived No-Effect Level
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
Eye irrit.	Eye irritation
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals", developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
log KOW	n-octanol/water
MARPOL	International Convention on Prevention of Pollution from Ships (abbr. to "Marine Pollutant)
NLP	A substance that no longer has the properties of a polymer
PBT	Persistent, bioaccumulative and toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulation on Carriage of Dangerous Goods by Rail)
Corrosion/irritation 2	Skin irritation
Skin Sens.	skin sensitization
vPvB	very Persistent and very Bioaccumulative
EO № Списъка на EC	(EINECS, ELINCS and NLP-list) is the source for the seven-digit EC number, an identifier for substances in commerce network within the EU (European Union)
Индекс №	the index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008
ЛОС	Volatile Organic Compounds

Main references and sources of data in the literature

- Regulation (EC) No 1907/2006 (REACH), as amended by (EU) 2020/878
- Regulation (EC) No 1272/2008 (CLP, EC GHS)

List of relevant phrases (code and full text as defined in Section 2 and 3)	
Code	Text
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



EUH 208	Contains Citral, Geraniol, Linalool, Limonene. May cause an allergic reaction.
	List of instructions for safe treatment, used in the safety document
P102	Keep out of reach of children
P261	Avoid breathing vapours
P264	Wash hands thoroughly after handling
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Use protective gloves/protective clothing/protective goggles /protective face mask.
P284	[In case of insufficient ventilation] Wear respiratory protection.
P305+P351+P338	IF CONTACT WITH EYES: Rinse thoroughly with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P301+P310	IF SWALLOWED: Immediately call a doctor/physician.
P331	Do NOT induce vomiting
P302 + P352	IF ON SKIN: Wash thoroughly with water/...
P333 + P313	In case of skin irritation or rash: seek medical advice/help
P391	Collect spillage
P403+P235	Store in a well ventilated place. Keep cool.
P405	Store locked up
P501	Dispose of contents / container at an approved disposal site in accordance with local and national regulations

Other information :

In accordance with general product specification:
The information in this material safety data sheet is meant to represent typical data/analysis for this product and was obtained from current and reliable sources.
To the best of our knowledge, data is accurate and based on our knowledge and information, at the time of publication.
The information presented is intended only as a guidance for proper and safe use, handling, storage, transportation and disposal, and should not be considered a guarantee /expressed or implied/ or a quality specification with respect to the correctness or accuracy.
It is responsibility of the user to determine any safe conditions for use of this product, and to assume responsibility for any loss, injury, damage or expenses resulting from the improper use of this product.
The information relates to the specific product only and is not valid when it used in combination with other materials or in any process, unless specified in the text.
The information provided does not constitute a delivery contract; regarding any specification or a given application, the buyer must determine for himself the requirements and recommendations for use of the product.



ALTEYA[®]
o r g a n i c s

Alteya's Campus, Village of Yagoda 6167, St.Zagora Region, Bulgaria | +359 700 15 502 | info@alteya.com | AlteyaOrganics.com

Disclaimer :

The data in this Safety Data Sheet correspond to the fair presentation of our experience at the time of printing. The information should give you basic guidelines for safe handling of this product, specified in the Safety Data Sheet, regarding its storage, processing, transport and disposal. Data cannot be assigned to other products.

If the product is mixed or processed with other materials, or if it is subject to processing, the data in this Safety Data Sheet cannot be assigned to the new material unless expressly stated otherwise.

The information provided is intended only as a guide to safe handling, use, processing, storage, transportation, disposal and release and should not be considered a warranty or quality specification.

Due to the many factors beyond our control in the use of this product, we cannot accept responsibility for accidents, mishaps, loss or damage caused by its use.

END!



LIST OF 26 ALLERGEN SUBSTANCES / ANNEX III TO REGULATION (EC) NO 1223/2009

Customer: „ALTEYA ORGANICS” LLC – 1. “Rozovarna” St., Yagoda village, 6167, Stara Zagora; salesbg@alteya.com, http://alteya.com, +359 700 15 502

Name of product: Organic Cardamom Oil / ELETARIA CARDAMOMUM SEED OIL

	NAME OF SUBSTANCES	REMARK	CAS №	EINECS №	NATURAL %	SYNTHETIC %	TOTAL %
1	AMYL CINNAMAL	H317; H411	122-40-7	204-541-5	-	-	-
2	AMYL CINNAMYL ALCOHOL	H315; H317	101-85-9	202-982-8	-	-	-
3	ANISE ALCOHOL	H302; H318 H317	105-13-5	203-273-6	-	-	-
4	BENZYL ALCOHOL	H332; H302	100-51-6	202-859-9	-	-	-
5	BENZYL BENZOATE	H302	120-51-4	204-402-9	-	-	-
6	BENZYL CINNAMATE	H317; H411	103-41-3	203-109-3	-	-	-
7	BENZYL SALICYLATE	H317; H411	118-58-1	204-262-9	-	-	-
8	CINNAMAL	H312; H315 H317	104-55-2	203-213-9	-	-	-
9	CINNAMYL ALCOHOL	H317	104-54-1	203-212-3	-	-	-
10	CITRAL	H315; H317	5392-40-5	226-394-6	0,001 – 0,1	-	0,001 – 0,1
11	CITRONELLOL	H315; H317 H411	106-22-9	203-375-0	-	-	-
12	COUMARIN	H302; H317	91-64-5	202-086-7	-	-	-
13	EUGENOL	H319; H317	97-53-0	202-589-1	-	-	-
14	FARNESOL	H315; H319	4602-84-0	225-004-1	-	-	-
15	ALPHA-ISOMETHYL IONONE	H412	127-51-5	204-846-3	-	-	-
16	GERANIOL	H315; H317	106-24-1	203-377-1	0,1 – 1,1	-	0,1 – 1,1
17	HEXYL CINNAMAL	H317;	101-86-0	202-983-3	-	-	-
18	HYDROXYCITRONELLAL	H319; H317	107-75-5	203-518-7	-	-	-
19	ISOEUGENOL	H312; H302H319; H315 H317	97-54-1	202-590-7	-	-	-
20	BUTYLPHENYL METHYLPROPIONAL (LILIAL)	H317	80-54-6	201-289-8	-	-	-
21	LIMONENE	H226; H315 H317; H411	5989-27-5	227-813-5	0.05 – 0,1	-	0.05 – 0,1
22	LINALOOL	H315	78-70-6	201-134-4	0,6 – 1,0	-	0,6 – 1,0
23	HYDROXYISOHEXYL 3-CYCLOHEXENE CARBOXALDEHYDE (LYRAL)	H317	31906-04-4	250-863-4	-	-	-
24	METHYL 2-OCTYNOATE	H302; H317	111-12-6	203-836-6	-	-	-
25	EVERNIA FURFURACEA LICHEN EXTRACT (TREMOSSE EXTRACT)	H317	90028-67-4	289-860-8	-	-	-
26	EVERNIA PRUNASTRI (OAK MOSS)	H317	90028-68-5	289-861-3	-	-	-



Alteya's Campus, Village of Yagoda 6167, St.Zagora Region, Bulgaria | +359 700 15 502 | info@alteya.com | AlteyaOrganics.com

According to Regulation EO 1223/2009 is hereby amended as follows:

The presence of the substance must be indicated in the list of ingredients referred to in Article 6(1)(g) when its concentration exceeds:— **0,001 %** in “**leave-on**” products, (and)— **0,01 %** in “**rinse-off**” products