MATERIAL SAFETY DATA SHEET

According to Regulation (EC) No 1272 of 2008 and Regulation (EC) No 1907/2006 (REACH), as amended by Regulation (EC) 2017/1510

Organic Cinnamon Leaf Oil

Version: 01 Creation date: 18.03.2021 Date of print: 09.04.2021

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

1.1. Product Identifier

Product name	:	Organic Cinnamon Leaf Oil
Name of substance (INCI)	:	CINNAMOMUM ZEYLANICUM LEAF OIL
CAS No	:	84649-98-9
EU No	:	283-479-0
Biological origin	:	Obtained from the leaves of Ceylon cinnamon, Cinnamomum zeylanicum, Lauraceae using the vapor distillation method.

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

Use of the substance/ mixture	:	For application in the sphere of the food industry, perfumery and cosmetics independently or as a recipe component, included in compositions.
Recommended restrictions on use	:	No information available

1.3. Details of the supplier of the safety data sheet

Manufacturer : "ALTEYA ORGANICS" LLC
Postal address/p.c. : **6167,** Yagoda village, Stara Zagora, 1, Rozovarna St.
Country identifier/ Postal code/settlement : Bulgaria
Telephone number/GSM/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; (normal working time excluding Saturday and Sunday) or 02 9154 346 (continuous service)
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				
Chapter	**Subsection**	**Class of hazard**	**Class of hazard and category of hazard**	**Hazard statements**
3.2	Skin	Skin irritation	Corrosion/irritation 2	H315
3.4	Sens.	Skin sensitization	(Skin sens. 1)	H317
3.3	Eye	Eye irritation	(Corrosion)Damage/ Irritation. 2A	H319
3.10	Inh.	Aspiration hazard	(Asp Tox 1)	H304
4.1	Chronic	Aquatic hazard	Aquatic Chronic 2	H411

2.1.2. Additional information:
For full text of hazard statements and EC specific hazard statements: see SECTION 16.

2.2. Label Elements

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

Hazard pictograms

GHS08 GHS07 GHS09

Signal word: Hazardous

Hazard statements

H304 May be fatal if ingested or entered respiratory tract
H315 Causes skin irritation.
H317 May cause allergic skin reaction.
H319 Causes serious eye irritation.

H411 Toxic for aquatic environment, with long lasting effect.
EUH 208 Contains Limonene, Benzyl Benzoate, Eugenol,alpha pinene, camphene, phellandrene, Cinnamaldehyde, safrole.
May cause allergic reaction.

Safety recommendations

Safety recommendations - general	P102	Keep away from children.
Safety recommendations - on preventing	P202	Do not use before you have read and understood all the safety measures.
	P261	Do not inhale evaporations.
	P264	After using wash thoroughly the hands and the contact skin.
	P272	Do not take the contaminated clothing outside the work premises.
	P273	Avoid releasing in environment.
	P280	Use protective gloves/protective clothing/ goggles/face mask.
	P284	[In case of poor ventilation] use respiratory protective equipment.
Safety recommendations -at reaction :	P305+P352	If eye contact: Wash thoroughly with water
	P338	for several minutes. Remove contact lenses if there are such and if possible. Continue washing.
	P337+P313	If eye irritation persists: seek medical advice/ help.
	P302+P352	IF SKIN CONTACT: wash thoroughly with water/…
	P333+P313	If skin irritation or rash: Seek medical advice/help.
	P362	Take off the contaminated clothing and wash it before reuse.
	P302+ P352	IF SKIN CONTACT: Wash thoroughly with soap and water.
	P304+P340	IF INHALING: Remove the individual to fresh air and locate in a position that makes breathing easier.
	P342+P311	`If symptoms of labored breathing: Call TOXICOLOGY Center or a physician.
Safety recommendations on disposal	P501	Dispose of the content / container in an approved disposal place in compliance with the local and national regulations.

2.3. Other hazards

No other information available.

The substance meets the vPvB criteria according to Regulations (EC) № 1907/2006, annex XIII .

3. Composition/information on ingredients

3.1. Substances/mixture

INGRIDIENT	IDENTIFIERS	%	CLASSIFICATION
CINNAMOMUM ZEYLANICOM LEAF OIL	*EINECS NO: 283-479-0* *CAS NO: 84649-98-9*	*100,0*	 *DANGER* *Skin Irrit. 2 – H315* *Skin Sems. 1B (H317)* *Eye Irrit. 2, H319* *Asp. Tox. 1– H304* *Aquatic Chronic 2 – H411*
Alpha thujene natural	*EINECS NO: -* *CAS NO: 2867-05-2*	*0,04*	*Flam. Liq. 3 - H226* *Skin Irrit. 2 – H315* *Eye Irrit. 2 - H319* *Asp. Tox., H335*
a-PINENE	*EINECS NO: 201-291-9* *CAS NO: 80-56-8*	*0,50*	*Acute Tox. Oral 5 (H303)* *Skin Sens. 1B (317)* *Skin Irrit. 2 (H315)* *Asp. Tox. 1 (H304)* *Flam. Liq. 3 (H226)* *Aquatic Acute 1 (H400)* *Aquatic Chronic 1 (H410)*
CAMPHENE	*EINECS NO: 209-275-3 / 201-234-8* *CAS NO: 565-00-4 / 79-92-5*	*0.1 – 1,0*	*Asp. Tox. 1, H304* *Eye Irrit. 2, H319* *Aquatic Acute 1, H400*
BENZALDEHYDE	*EINECS NO: 202-860-4* *CAS NO: 100-52-7*	*0,07*	*Acute Tix. 4 – H302*
ALPHA - PHELLANDRENE	*EINECS NO: 202-792-5* *CAS NO: 99-83-2*	*0,62*	*Flam. Liq. 3 – H226* *Asp. Tox. 1 (H304)* *Skin Irrit. 2 (H315)* *Skin Sens. 1B (H317)* *Carc. 2 H351* *Repr. 2 H361d*
Alpha Terpinolene	*EINECS NO: 202-795-1* *CAS NO: 99-86-5*	*0,2 – 2,0*	*Flam. Liq. 3 – H226* *Acute Tox. 4; H302* *Asp. Tox. 1 – H304* *Aquatic Chronic 2, H411*
Cinnamaldehyde	*EINECS NO: 203-213-9* *CAS NO: 104-55-2*	*0,71*	*Acute Tox. 4 – H312* *Skin Irrit. 2 – H315* *Skin Sens. 1B (H317)* *Eye Irrit.2, H319*
LIMONENE	*EINECS NO: 227-813-5* *CAS NO: 5989-27-5*	*0,13*	*Flam. Liq. 3 – H226* *Skin Irrit. 2 –H315*

			Skin Sens. 1 – H317 *Asp. Tox. 1 – H304* *Aquatic Acute 1 – H400* *Aquatic Chronic 1 – H410*
Safrole	*EINECS NO: 202-345-4* *CAS NO: 94-59-7*	*0,82*	*Acute Tox. 4; H302* *Skin Irrit. 2; H315* *Muta. 2; H341* *Carc. 1B; H350*
EUGENOLE	*EINECS NO: 202-589-1* *CAS NO: 97-53-0*	*70,0 – 88,0* *82,94*	*Flam. Liq. 3 – H226* *Asp. Tox. 1, H304* *Eye Irrit. 2 - H319* *Aquatic Chronic 4 – H413* *Acute Tox. 4, H302* *Skin Irrit. 2 – H315* *Skin Sens. 1 – H317*
BENZYL BENZOATE	*EINECS NO: 204-402-9* *CAS NO: 120-51-4*	*0,5 – 5,5*	*Acute Tox. 4; H302* *Acute Chronic 2, H411*
Alpha Terpinolene	*EINECS NO: 202-795-1* *CAS NO: 99-86-5*	*0,2 – 2,0*	*Flam Liq. 3 – H226* *Acute Tox. 4; H302* *Acute Tox. 1 - H304* *Aquatic Chronic 2, H411*
BETA-CARYOPHYLLENE/ (-)-trans-Caryophyllene	*EINECS NO: 202-795-1* *CAS NO: 99-86-5*	*1,0 – 6,0*	*Not classified as hazardous according to EC Regulation 1272/2008/EC*
Cinnamyl acetate	*EINECS NO: 203-121-9* *CAS NO: 103-54-8*	*0,1 – 2,0*	*Eye Irrit. 2 – H319*
EUGENYL ACETATE	*EINECS NO: 202-235-6* *CAS NO: 93-28-7*	*2,0 – 5,0*	*Acute Tox. 4; H302*

4. First aid measures

4.1. Description of first aid measures

General notes : In case of sickness seek medical advice (Present the label if possible).

Following inhalation : Not expected under normal conditions of use. In case some symptoms occur move the individual to fresh air and seek medical help.

Following skin contact : If symptoms of skin irritation (erythema) occur wash thoroughly with water.

Following eye contact : Wash with plenty of water under the eyelids as well

for at least 15 minutes. If symptoms (irritation, burning) persists seek medical help.

Following ingestion	:	Not expected way of exposure. In case a small quantity is swallowed (not more than one spoon), rinse the mouth with milk or water and consult a doctor.

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

If skin contact	:	The repeated contact may cause allergic dermatitis.
If eye contact	:	If not washed immediately may cause eye irritation and cornea damage.
If inhaled	:	Inhalation of high concentration may have anesthetic effect.
If ingested	:	Not expected way of exposure.

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

Treatment	**:**	No information available.

5. Firefighting measures

5.1. Extinguishing media

Suitable	:	Alcohol resistant foam, multifunctional ABC powder, BC powder, carbon dioxide (CO2).
Unsuitable extinguishing media	:	Do not use direct water jet on burning material.

5.2. Special hazards arising from the substance or mixture

Specific hazards during firefighting	:	Carbon oxide, unindentified organic compounds.

5.3. Advice for firefighters

Special protective equipment for firefighters	:	Wear protective clothing and self-contained breathing apparatus to avoid inhaling evaporations.
Additional information	:	No information available.

6. Accidental Release Measures

6.1. Personal precautions, protective equipment and procedures for emergencies

6.1.1. For personnel not responsible for emergencies

Avoid leakage if you can do it without any risk.
Get introduced with the safety measures, specified in sections 7 and 8.

For firefighters: The firefighters must be Equipped with adequate personal protective equipment (see section 8).
The high temperature may increase the pressure in the containers – cool the container, spraying water on it. Avoid inhaling the released evaporations.

6.1.2. For the persons responsible for emergencies

Personal protective measures: Keep good professional and personal hygiene. Avoid inhaling the vapors of the product and the contact with the skin and the eyes.

6.2. Environmental precautions

Environmental precautions : Do not dispose of the product in sewer systems, water sources and water-conduits.
Inform the respective authorities in case of penetration in the sewer systems or the water routes.

6.3. Methods and materials for containment and cleaning up

6.3.1. For containment : Absorb the leakage using non-flammable substances (such as detergent – do not use solvents) and transfer into containers.

6.3.2. For clean up : Placed in covered containers and dispose of following the instructions of the local authorities.

6.3.3. Other information : Inform the respective authorities in case of penetration in sewer system or the water routes.

6.4. Reference to other sections

For personal protection see Sections 8.
For destroying see section 13.

7. Handling and Storage

7.1. Precautions for safe handling

Precautions	:	Handle according to good professional, hygiene and safety practice. Avoid accidental contact with surface of the skin. Wear appropriate protective clothing. Avoid inhaling. Avoid contact with eyes. Always wash hands after work. Remove the contaminated clothing and wash it before reuse.
Fire-fighting measures	:	Keep away from heat. Keep away from ignition sources.
. Measures to prevent the transformation of aerosols and powder	:	Provide appropriate ventilation for exhaust gases at the working place.
Hygiene measures	:	Wash your hands before breaks and at the end of the working day. Avoid eye contact.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions	:	Keep in full and tightly closed containers away from heat, light and other ignition sources at temperature not higher than 15^{o}C. When not in use keep the container tightly closed.
Incompatible materials	:	Sludge may be formed in galvanized packages.
Packing materials	:	Always store in packings preserving the integrity and quality of the product.
Storage class	:	No information available.
Additional information on storage conditions	:	Follow the advices on combined storage.
Recommendations on protection from fire and explosions	:	Keep away from ignition sources and naked flame.
Powder explosions class	:	No information available.
Recommendations for basic storage	:	Follow the good manufacturing and occupational hygiene practices and secure appropriate ventilation at the working area. Maintain good personal hygiene and when working do not eat, drink and smoke.

It is recommended to follow the requirements concerning the packing and storage according to ISO/TS 210:2015.

7.3. Specific end use(s)

Recommendations	:	Read the label before using.
Solutions specific for industry sector	:	No information available.
Specific use(s)	:	For application in the sphere of perfumery and cosmetics independently or as a recipe component, included in compositions.

8. Exposure Controls/Personal Protection Equipment

8.1. Control parameters

The occupational exposure limit values are based on the international limit values GESTIS.

Other occupational exposure limits

Information on monitoring procedures

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

EUGENOL NAT – CAS: 97-53-0
INDUSTRY EMPLOYEE: 21.2 MG/M^3 – CUSTOMER: 5.22 MG/M^3 – EXPOSURE: INHALING HUMAN – FREQUENCY: LONG TERM, SYSTEMIC EFFECTS

INDUSTRY EMPLOYEE: 6 MG/KG – CUSTOMER: 3 MG/KG – EXPOSURE: DERMAL SKIN – FREQUENCY: LONG TERM, SYSTEMIC EFFECTS
CUSTOMER: 3 MG/KG –EXPOSURE: ORAL FOR PEOPLE – FREQUENCY: LONG TERM, SYSTEMIC EFFECTS
EUGENOL NAT – CAS: 97-53-0
NDUSTRY EMPLOYEE: 21.2 MG/M^3 – CUSTOMER: 5.22.MG/M^3 – EXPOSURE: INHALING HUMAN – FREQUENCY: LONG TERM, SYSTEMIC EFFECTS

INDUSTRY EMPLOYEE: 6 MG/KG – CUSTOMER: 3 MG/KG – EXPOSURE: DERMAL SKIN – FREQUENCY: LONG TERM, SYSTEMIC EFFECTS
CUSTOMER: 3 MG/KG –EXPOSURE: ORAL FOR PEOPLE – FREQUENCY: LONG TERM, SYSTEMIC EFFECTS

CINNAMALDEHYDE 104-55-2
DNEL2.204 mg/m3 human, through inhalation (employee) chronic – systemic effects
DNEL 2,513 mg/kg human, dermal employee (industry) chronic – systemic effects

EXPOSURE LIMIT VALUES OF PNEC
EUGENOL, NAT – CAS: 97-53-0
TARGET: FRESH WATER – VALUE: 1,13 03
TARGET: MARINE WATER – VALUE: 0,113 03
TARGET: FRESH WATER SEDIMENT- VALUE: 0,081 MG/KG
TARGET: MARINE SEDIMENT – VALUE: 0,081 MG/KG
TARGET: SOIL (AGRICULTURAL) – VALUE: 0,0155 MG/KG
TARGET: EMISSIONE SALTUARIA – VALUE: 11,3 03
EUGENOL, NAT – CAS 97-53-0
TARGET: FRESH WATER – VALUE: 1,13 03
TARGET: MARINE – VALUE: 0,113 03
TARGET: FRESH WATER SEDIMENTS – VALUE: 0,081 MG/KG
TARGET: MARINESEDIMENTS – VALUE: 0,081 MG/KG
TARGET: SOIL (AGRICULTURAL) – VALUE: 0,0155 MG/KG
TARGET: EMISSIONE SALTUARIA – VALUE: 11,3 03

CINNAMALDEHYDE 104-55-22

PNEC 1,004 MG/L FRESH WATER SHORT TERM (SINGLE INSTANCE)

PNEC 0,1 MG/L MARINE WATER SHORT TERM (SINGLE CASE)

PNEC 1,004 MG/L WATER CONTINUOUSLY

PNEC 13,12,MG/L SEWAGE TREATMENT PLANT (STP) SHORT TERM (SINGLE INSTANCE)

PNEC 159.2 MG/L FRESH WATER SEDIMENT SHORT TERM (SINGLE CASE)

PNEC 159.2 MG/L MARINE SEDIMENT SHORT TERM (SINGLE CASE)

PNEC 56,09 MG/L SHORT TERM (SINGLE CASE)

8.2. Exposure controls

8.2.1. Appropriate engineering control

Measures related to the substance/mixture to prevent exposure during identified uses : The description of the appropriate exposure control measures refers to the specified in subsection 1.2 identified uses of the substance or the mixture. Usually general or local exhaust ventilation is required in order to observe the exposure limits.

8.2.2. Personal protective equipment:

Use clean and properly kept personal protective equipment. Store the personal protective equipment in a clean location, and far from the working area. Never eat, drink and smoke when handling. Remove the contaminated clothing and wash before re-use.

8.2.2.1. Eyes and face protection: Avoid eye contact. Use protective goggles (protective

goggles in compliance with standard EN 166) intended to avoid splashes.

8.2.2.2. Skin protection

Hand protection	:	In case of long term or repeated skin contact wear appropriate protective gloves (resistant to chemical agent and in compliance with the requirements of standard EN374). Recommended type of gloves: natural rubber (butadiene-acrylonitrile co-polymer rubber (NBR) or PVA (polyvinyl alcohol)
Body protection	:	The protection clothing used by the employees should be regularly washed. Following a contact with the product all the contaminated part should be washed.
8.2.2.3. Respiratory tract protection	:	In case of ventilation that is not adequate use appropriate equipment for respiratory protection. Recommended filter type: P
8.2.2.4. Thermal hazards	:	No data available.
8.2.2.5. Additional protection	:	In case of spillage shoes preventing slipping may be used.
Training measures related to the avoiding of exposition	:	Training of the staff is organized according to a company schedule.
Organization measures to avoid exposition	:	Training of the staff.
. Technical measures to avoid exposition	:	Training of the staff.

Environmental exposure controls

Basic instructions	:	Do not flush into in surface waters and sewer systems.

9. Physical and chemical properties

9.1. Information on the basic physical and chemical properties

Appearance	:	Transparent mobile liquid, oxidation in air

and aging increases viscosity.

Color	:	yellow to brown-reddish
Odor	:	characteristic, spicy, reminiscent of spice clove and cinnamon notes
Taste	:	sweet, slightly spicy taste
Odor threshold	:	No information available.
Safrole content in%	:	0.82
pH	:	No information available.
Acid value, mg KOH/g	:	No information available
Freezing point in ^{o}C	:	No information available.
Melting point in ^{o}C	:	No information available.
Boiling point	:	No information available.
Boiling point / boiling range	:	No information available.
Flammability point	:	97^{o}C
Evaporation rate	:	No information available.
Flammability (solid substance, gas)	:	No information available
Upper flammability/ explosion limit	:	No information available
Lower flammability/ explosion limit	:	No information available
Vapor pressure at 20^{o}C	:	No information available.
Solubility(s)	:	Soluble in benzyl benzoate, diethyl phthalate propylene glycol, vegetable oils, glacial acetic acid; in alcohol and oils.
Insoluble in	:	water, glycerin and mineral oils.

Partition coefficient n-octanol/water Log/Pow	:	No information available.
Autoignition temperature	:	No information available.
Decomposition temperature	:	No information available.
Explosive properties	:	No information available.
Oxidizing properties	:	No information available.

Other information

Refraction index at n^{20}/d	:	1,525 to 1.561
Relative density at n^{20}	:	1.010 to 1.241
Optical rotation at (20°C)	:	0,74

No other information available.

10. Stability and reactivity
10.1. Reactivity

Advice	:	No information available.

10.2 Chemical stability

Note conditions,	:	Stable under the recommended storage

10.3. Possible hazardous reactions

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

10.4. Conditions to avoid

Conditions to avoid	:	Keep away from ignition sources – do not smoke. Do not store near heat, sparks, naked flame, strong acids and strong alkali. To reduce the decomposition of the product to minimum

avoid prolonged exposure of the material to air.

Thermal decomposition : No data available.

10.5. Incompatible materials

Materials to be avoided : Alkaline metals, ammonia, oxidizers, peroxides and strong inorganic aids.

10.6. Hazardous decomposition products

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

11. Toxicological information

11.1.Information on toxicological effects

Acute toxicity / Oral

CINNAMOMUN ZEYLANICUM LEAF OIL 84649-98-9

Method	**:**	**LD50**
Species	**:**	**rat**
Routes exposure	**:**	**oral**
Effective dose	**:**	**-**
Duration of exposure	**:**	**-**
Results	**:**	2650 mg/kg
Source	**:**	Food and Cosmetics Toxicology. Vol. 13, Pg. 749, 1975

BENZYL BENZOATE 120-51-4
LD50 Oral – rabbit = 1,680 mg/kg
Notes: behavioral convulsions or effects on seizure threshold.
Lungs, thorax or breathing: dyspnea (RTECS)
Symptoms: nausea, vomiting, diarrhea.
Symptoms: irritation of the respiratory tract.
LD50 Dermal – rabbit 4,000 mg/kg
Notes: (RTECS)

D-LIMONENE(CAS:5989-27-5)
ORAL ROUTE: LD50= 4,400 - 5,10MG/KG
SPECIES : Rat

EUGENOL (CAS: 97-53-0)
Oral: LD50 = 2300 mg/kg

CINNAMALDEHYDE
Oral LD50 2,220 mg/kg rat ECHA

Corrosion/Skin irritation

CINNAMOMUM ZEYLANICUM LEAF OIL 84649-98-9

Method : LD50
Species : rat
Routes exposure : dermal
Effective dose : -
Duration of exposure: -
Results : > 5000 mg/kg
Source : Food and Cosmetics Toxicology. Vol. 13, Pg. 749, 1975

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

EUGENOL (CAS: 97-53-0)
LD50 Oral-Rat – male - >2.000 mg/kg (OECD guideline 423) LD50
Breathing in - Rat – male – 4h ->2,6 mg/l (OECD guideline 403)

CINNAMALDEHYDE 104-55-2
Oral LD50 1,260 mg/kg rabbit ECHA

Notes: Irritates skin and mucous membranes.

Serious damage/ irritation of eyes

Result : Serious damage of eyes.

Eugenol 97-53-0
Eyes – Rabbit Result: Eye irritation (OECD Guideline 405)

Respiratory or skin sensitization

Eugenol 97-53-0
Local lymph node assay (LLNA) – Mouse Positive result (OECD Guideline 429)

Note : May cause allergic skin reaction.
High risk of possible sensitization in case of skin contact.

Ingestion

Note : No data available.

Mutagenicity of germ cells

Note : CAS 94-59-7 Safrole
It is assumed that the product causes genetic defects.

Carcinogenicity

Note : CAS 5989-27-5: IARC group 3: The agent cannot classified as carcinogenic for human.

IARC: 3-Group 3 : Cannot be classified as carcinogenic for people. (Eugenol)

Summary of the assessment of CMR properties

Note : Not data available.

STOT (specific target organ toxicity) — single exposure

Note : Not data available.

STOT (specific target organ toxicity) — repeated exposure

Note : Not data available.

Aspiration hazard

Note : Inhalation of high vapor concentrations may have anesthetic effect.

Information on possible routes of exposure

Note : Dermal, oral.

Symptoms related to physical, chemical and toxicological characteristics

Note	:	Toxicological properties are not comprehensively explored.

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

Note	:	Toxicological properties are not comprehensively explored.

Interactions

Note	:	Toxicological properties are not comprehensively explored.

Lack of specific data

Note	:	Toxicological properties are not comprehensively explored.

Mixtures

Note	:	Toxicological properties are not comprehensively explored.

Medical considerations

Note	:	People with rash should be directed to dermal specialist to be tested for allergic eczema.

Other information

Note	:	The oil is highly active and a consultation with a specialist is required. Not recommended for allergic and pregnant individuals, and breast-feeding women 2h before the breast-feeding.

12. Ecological information

Note	:	Harmful for aquatic life with long lasting effect. The product should not be released into canals and water routes.

12.1. Toxicity

Product:

Acute (short-term) toxicity:

Fish

BENZYL BENZOAT 10-51-4
Semi static test LC50 – Danio rerio (barbus) – 2,32,mg/l – 96 h

EUGENOL (CAS: 97-53-0)
LC50-Caniorerio (zebra fish)-13 mg/l-96h (Eugenol)
(OECD Test Guideline 203)

CINNAMALDEHYDE 104-55-2
LC50 105,8 mg/l fish ECHA 96 hours

Toxicity to daphnia and other aquatic invertebrates

EUGENOL (CAS: 97-53-0)
ec 50-daphnia (water flea)-1.13 mg/l – 48h (eugenol)

BENZYL BENZOATE 120-51-2
Static test EC50 – Daphnia magna (Daphnia) – 3,09 mg/l – 48h
(OECD Test Guideline 202)

CINNAMALDEHYDE 104-55-2
EC50 119,6 mg/l aquatic invertebrates ECHA 48 hours

Algae/aquatic plants

BENZYL BENZOATE 120-51-4
Static test ErC50 – Pseudokirchneriella subcapitala (green algae) – 0,475 mg/l – 72 h
(OECDGUIDELINE 201)

Bacteria

Benzyl Benzoate 120-51-4
Static test EC50 – activated sludge - > 10,000mg/l – 3h
(OECD guideline 209)

Chronic (long-term) toxicity:

Note : No data available.

Fish

Note : No data available

Shellfish		
Note	:	No data available

Algae/water plants		
Note	:	No data available

Other organisms		
Note	:	No data available

12.2. Persistence and degradability

Product:

Abiotic degradation		
Note	:	No data available

Physical and photo-chemical elimination		
Note	:	No data available

Biochemical degradation		
Note	:	Biodegradation expected.

12.3. Bioaccumulation

Product **:** Bioaccumulation is unlikely

Partition coefficient n-octanol/water (log Kow)		
Note	:	No data available

Bioconcentration factor (BCF)		
Note	:	Does not accumulate in biological environment

12.4. Mobility in soil

Product:

Known or predicted distribution in environmental components		
Note	:	No data available

Surface tension		
Note	:	No data available

Adsorption/desorption		
Note	:	No data available

12.5. Results of PBT and vPvB assessment

The product doesn't contain substances considered persistent, bioaccumulative or toxic PBT.

Product:		
Results of PBT and vPvB assessment		
Notes	:	No information available.

12.6. Other adverse effects

Product:		
Biochemical oxygen demand (BOD)		
Value	:	No information available.
Chemical oxygen demand (COD)		
Value	:	No information available.
Additional ecological information/Mobility in soil		
Notes	:	No information available.

12.7. Additional information

Notes	:	Do not allow penetration of product in streams, sewer systems or other water routes.

13. Disposal considerations

13.1. Waste treatment methods

13.1.1. Disposal of product/packing

Codes/designation of the waste according to LoW: -

Product	:	The product can be burnt in chemical incinerator. Submit the solutions left and not recycled to an authorized disposal company. Contact an authorized professional service to destroy the material.
Contaminated packing material	:	Dispose of as an unused material.

European Waste Catalogue 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 consultation with the Regional waste service.
13.1.2. Information on waste treating	:	To destroy the material contact an authorized professional service.
13.1.3. Information on discharge in the sewer system	:	Do not allow penetration of the product in streams, canals or other water routes.
13.1.4. Other recommendations on waste disposal	:	No data available.

14. Transport Information

Transport icon : **Class: 9 Different hazardous substances and articles.**

14.1. UN name

UN 3082

14.2. UN proper shipping name

3082 HAZARDOUS SUBSTANCES IN TERMS OF ENVIRONMENT, LIQUID, N.O.S.

14.3. Transport hazard class(es)

Class 9. Pack gr. III

14.4. Environmental hazard

14.5. Special precautions for user

Other applicable information (road transport)

E1

14.6. Transport in bulk according to Annex II to MARPOL 73/78 and IBC"

Road transport

ADR	*3082 HAZARDOUS SUBSTANCES IN TERMS OF ENVIRONMENT, LIQUID, N.O.S.*
RID	*Classification code: M6.* *Limited quantity: 5 l* *Transport category: 3* *No of hazard: 90* ` *Code of tunnel limitation: E*

Waterway transport

ADN	*3082 HAZARDOUS SUBSTANCES IN TERMS OF ENVIRONMENT, LIQUID, N.O.S.* *Classification code: M6.* *Special instructions: Limited quantity: 5 l*

Maritime transport

IMDG	*3082 HAZARDOUS SUBSTANCES IN TERMS OF ENVIRONMENT, LIQUID, N.O.S.* *Marine pollutant: Yes* *Special instructions: 274, 335.* *Limited quantity: 5 l.* *EmS: F-A, S-F*

Air transport

IATA/CAO	*3082 HAZARDOUS SUBSTANCES IN TERMS OF*

ENVIRONMENT, LIQUID, N.O.S.
Special instructions: A97, A158
Limited quantity: 30 kg G
IATA Packing instruction: Passenger: 964
IATA – max. quantity – Passenger: 450L
IATA packing instructions – Load: 964
IATA – max. quantity – Load:450 L

15. Regulatory Information

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

Other regulations / Laws	:	This safety data sheet is consistent with the Law on Protection from Harmful Effects of Chemicals and the Ordinance on Classification, Packaging and Labelling
EU legislative acts		According to the regulations of EU.
Other regulations, restrictions and prohibitions regulations		According to Regulation 1223/2009 *The component Safrole is prohibited for use in cosmetics products excluding the normal content in the used natural essential oils in concentration not exceeding: - 100 ppm or 0,01% in the ready cosmetics product - 50 ppm or 0,005 in the products used for the hygiene of the teeth and mouth in case it doesn't contain safrole especially in children's teeth paste. **IFRA limits its use in PK for parfume and cosmetics preparations up to 1% *The maximum level of this oil for dermal use is 0,5% - for cosmetics product /without washing/ based on cynamaldehyde and safrole content in the oil.

15.2. Chemical Safety Assessment

No information available.
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 concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
Acute Tox. 4	Acute toxicity
Aquatic Chronic	Hazardous for aquatic life – aquatic chronic
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 (CLP)
CMR	Carcinogenic, mutagenic and toxic for reproduction (substance)
COD	Chemical Oxygen Demand
DGR	Dangerous Goods Regulations
DMEL	Derived Minimal Effect Level
DNEL	Derived No-Effect Level
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European Inventory of Existing Commercial Chemical Substances
EmS	Emergency Schedule
Eye Irrit.	Eye irritation
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals"
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 for the Prevention of Pollution from Ships (abbr. to Marine Pollutant)
NLP	Substance not having its polymer already
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 (Regulations concerning the International Carriage of Dangerous Goods by Rail)
Skin Sens.	Skin sensitization
vPvB	very Persistent and very Bioaccumulative
EU No in the list of the EC	(EINES, ELINCS AND NLP – LIST) is the source of the seven number EU number, identifier of the substances on the market in the EU (European Union)
Index No	The index No is the identification code specified for the substance in part 3 of annex VI of Regulation (EC) 1272/2008
VOC	Volatile Organic Compounds

Main references and sources of data in the literature
- Regulation (EC) No 1907/2006 (REACH), as amended by 2015/830/EU
- 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 ingested or entered respiratory tract
H315	Causes skin irritation
H317	May cause allergic skin reaction
H319	Causes serious eye irritation
H411	Toxic for aquatic environment, with long-lasting effect
EUH 208	Contains *Limonene, Benzyl Benzoate, Eugenol, alpha pinene, camphene, phellandrene, Cinnamaldehyde, safrole*. May cause allergic reaction
	List of instructions for safe handling, used in the safety document
P102	Keep away from children.
P202	Do not use before you have read and understood all protective measures
P261	Avoid inhaling evaporations
P264	Wash thoroughly hands and other contact skin after using the product
P284	[In case of poor ventilation] use protective equipment for the respiratory tract
P304 + P340	IF INHALED: remove the victim to fresh air and place in a position facilitating breathing
P342 + P311	If symptoms of dyspnea: call TOXICOLOGY CENTER/physician/…
P272	Do not take the contaminated clothing away from the working premises
P280	Use protective gloves / protective clothing / protective goggles / protective face mask
P302 + P352	IF SKIN CONTACT: wash with plenty of water / ….
P362	Take off the contaminated clothing and wash it before re-use
P305+ P351 + P338	If eye contact: Wash carefully with water for several minutes. Remove the contact lenses if there are such and if possible. Continue washing.
H337 + H313	If eye irritation persists: seek medical advice
P333 + P313	If skin irritation or rash: seek medical advice
P273	Avoid releasing in environment
P501	Dispose of the content / container at an approved disposal site according to the local and national regulations

Other information :

In accordance with general product specification:
The information in this material safety data sheet represents 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 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 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 for a given application, the buyer must determine for himself their requirements and recommendations for use of the product.

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.

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

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 or quality specification with respect to the correctness or accuracy.
Due to the many factors out of our control while using this product we cannot undertake responsibility for accidents, fatalities, losses or damages, caused by its usage.

E N D!

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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: Cinnamon Leaf Oil (Cinnamomum Zeylanicum Leaf Oil - Organic)

	NAME OF SUBSTANCES	REMARK	CAS №	EINECS №	NATURAL %	SYNTHETIC %	TOTAL %
1	*AMYL CINNAMAL*	H317; H411	122-40-7	204-541-5	-	-	-
2	*AMYLCINNAMYL 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	2,95	-	2,95
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	0,71	-	0,71
9	*CINNAMYL ALCOHOL*	H317	104-54-1	203-212-3	-	-	-
10	*CITRAL*	H315; H317	5392-40-5	226-394-6	-	-	-
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	82,94	-	82,94
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	-	-	-
17	*HEXYL CINNAMAL*	H317;	101-86-0	202-983-3	-	-	-
18	*HYDROXYCITRONELLAL*	H319; H317	107-75-5	203-518-7	-	-	-
19	*ISOEUGENOL*	H312; H302 H319; 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	*0,13*	-	*0,13*
22	*LINALOOL*	H315	78-70-6	201-134-4	-	-	-
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 (TREEMOSS EXTRACT)*	H317	90028-67-4	289-860-8	-	-	-
26	*EVERNIA PRUNASTRI (OAK MOSS)*	H317	90028-68-5	289-861-3	-	-	-

According to Regulation EO 1223/2009 и Directive 76/768/EEC is hereby amended as follows:
The presence of the substance must be indicated in the list of ingredients referred to inArticle 6(1)(g) when its concentration exceeds:— **0,001 %** in"**leave-on"**products, (and)— **0,01 %** in**"rinse-off"**products