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MATERIAL SAFETY DATA SHEET

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

Organic Sweet Orange Oil

Version 02 | Date of creation: 15.07.2020
Supersedes the version from: 15.07.2020 | Date of new version: 29.08.2022

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

1.1. Product Identifiers

Trade name	:	Organic Sweet Orange Oil
Substance name (INCI)	:	CITRUS AURANTIUM DULCIS PEEL OIL
REACH Registration number	:	-
CAS №	:	8008-57-9
EO №	:	-
ISO	:	ISO 3140:2019
Biological origin	:	Obtained from the fruit peels of sweet oranges of the species Citrus sinensis (L.) Osbeck = C.vulgaris Risso ssp. sinensis = C.auranthium L. var dulce (var.sinensis). The oil is extracted from the fruit peels by pressing without heating.

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

Use of substance/mixture	:	Used in 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 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				
Chapter	**Subsection**	**Class of hazard**	**Class of hazard and category of hazard**	**Hazard statements**
3.10	Inh.	Inhalation hazard	(Asp Tox 1)	H304
3.2	Skin	Skin irritation	Corrosion/irritation 2	H315
3.4	Sens.	Sensitization — skin	(Skin sens 1)	H317
4.1	Chronic	Hazardous to the aquatic environment	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

H411 Toxic to aquatic life with long lasting effects

EUH 208 Contains Limonene, Linalool. May cause an allergic reaction.

Safety recommendations

Safety recommendations

P102 Keep out of reach of children

Safety recommendations

- Prevention :

P262 Do not get in eyes, on skin, or on clothing
P233 Keep container tightly closed.
P264 Wash hands thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

- Safety recommendations
- As a reaction :

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor/…
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P302 + P352 IF ON SKIN: Wash with plenty of water/…
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
P362 + P364 Remove contaminated clothing and wash before reuse
P391 Collect spillage.

Safety recommendations

- If stored

P403+P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up

Safety recommendations

- At disposal :

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

Other hazards

No other information available.
The substance is not PBT / vPvB.

3. Composition/information on ingredients

3.1. Substances /Mixture –*The main hydrocarbon in the oil is limonene, and from the others: myrcene, sabinene, etc.*

INGRIDIENT	IDENTIFIERS	%	CLASSIFICATION
CITRUS AURANTIUM DULCIS PEEL OIL	*EINECS NO: -* *CAS NO: 8008-57-9*	*100,0*	 *DANGER* *Asp. Tox. 1, H304* *Skin Irrit. 2 – H315* *Skin Sens. 1B H317* *Aquatic Chronic 2 H411*
LIMONENE	*EINECS NO: 227-813-5* *CAS NO: 5989-27-5*	*84,0 ≥ 97,0*	*Flam. Liq. 3 – H226* *Skin Irrit. 2 – H315* *Skin Sens. 1 – H317* *Asp. Tox. 1 – H304* *Aquatic Acute 1 – H400* *Aquatic Chronic 1 – H410*
MYRCENE	*EINECS NO: 204-622-5* *CAS NO: 123-35-3*	*1,0 ≥ 4.0*	*Eye Irrit. 2 - H319* *Acute Tox.Oral 4 – H302* *Skin Irrit. 2 – H315* *Chr aq. toxicity –Category 4. H413*
LINALOOL	*EINECS NO: 201-134-4* *CAS NO: 78-70-6*	*≤ 1,0*	*Eye Irrit. 2A (H319)* *Skin Sens. 1B (H317)* *Skin Irrit. 2 (H315)*
OCTANAL	*EINECS NO: 204-683-8* *CAS NO: 124-13-0*	*Up to 2,0*	*Flam. Liq. 3 - H226* *Skin Irrit. 2 – H315* *Eye .irrit, Cat. 2A; H319* *Aquatic Acute 2 – H401* *Aquatic Chronic 2 – H411*
DECANAL	*EINECS NO: 203-957-4* *CAS NO: 112-31-2*	*0,08 – 0,7*	*Eye .irrit, Cat. 2A; H319* *Aquatic Acute 3 – H402* *Flam. Liq. 4 - H227*
SABINENE	*EINECS NO: 222-212-4* *CAS NO: 3387-41-5*	*0,02- 0,7*	*Flam. Liq. 3, H226*
α-PINENE	*EINECS NO: 201-291-9* *CAS NO: 80-56-8*	*Up to 1,5*	*Acute Tox. Oral 5 (H303)* *Skin Sens. 1B (H317)* *Skin Irrit. 2 (H315)* *Asp. Tox. 1 (H304)* *Flam. Liq. 3 (H226)* *Aquatic Acute 1 (H400)* *Aquatic Chronic 1 (H410)*

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	:	Move the exposed person immediately from the source of exposure to fresh air. If symptoms persist, seek medical attention.
Following skin contact	:	Remove contaminated clothing immediately. Wash the skin thoroughly with soap and water for several minutes. Be careful of product residue between skin and clothing, watches, shoes, etc. In case of an allergic reaction, seek medical help. A known photosensitizer.
- Following eye contact	:	Rinse immediately with plenty of water for up to 15 minutes by removing the contact lenses. Seek medical attention immediately. Continue rinsing.
- Following ingestion	:	Not an expected route of exposure. In case of ingestion, if the amount is small (not more than one bite), rinse the mouth with milk or water and consult a doctor. Keep the exposed person at rest. DO NOT force vomiting unless directed by medical personnel. Seek immediate medical attention and show the label of the substance to medical personnel.
- Self-protection of first aid provider	:	No data available.

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

- Following eye contact		May cause eye irritation and corneal damage if not rinsed immediately.
- In case of contact with	:	Remove contaminated clothing immediately. Wash the skin thoroughly with soap and water for several minutes. In case of redness or irritation, call a doctor. A known photosensitizer.

- Following inhalation : Breathing high vapor concentrations may cause anesthetic effects.

- Following ingestion : Not an expected route of exposure.

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

Treatment : There is no specific antidote.
Treat symptomatically.

5. Fire-fighting Measures

5.1. Extinguishing media

Suitable extinguishing media : CO_2, alcohol-resistant foam, powder, water spray

Unsuitable extinguishing media : water jet (straight stream).

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products : In case of fire, carbon monoxide (CO), carbon dioxide (CO_2), smoke and soot may be released

Specific hazards during fire-fighting : Containers can build up pressure when exposed to heat (fire).

5.3. Advice for firefighters

Special protective equipment for firefighters : Wear self-contained breathing apparatus and full protective clothing to minimize skin exposure. Avoid inhaling vapors.

Additional information : Extinguish the fire with the usual precautions from a reasonable distance. Do not use a full water stream in order to prevent fire from spreading. Cool the containers in danger with water spray. Separately collect the contaminated water from the fire extinguishing. It should not go down the drain. Dispose of fire debris and contaminated fire water in accordance with official regulations.

6. Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For personnel not responsible for emergencies

Personal precautions, protective equipment and procedures	:	Remove all sources of ignition. Wear protective equipment. Keep unprotected persons away. Avoid inhalation, contact with skin and eyes. Provide adequate ventilation. Evacuate all unnecessary personnel.

6.1.2. For the persons responsible for emergencies

Stop the leak if you can do so without risk. Wear personal protective equipment. Ensure adequate ventilation. Unprotected persons are not allowed. Avoid contact with eyes and skin. Avoid breathing fumes. Keep ignition sources away.

6.2. Environmental precautions

Environmental Precautions	:	Do not allow it seeps into the ground/soil. Do not allow the product to reach drains or bodies of water. Inform the relevant authorities in case of leakage into water bodies or sewage system. Do not allow it to enter drains/surface or ground water.

6.3. Methods and materials for containment and cleaning up

6.3.1. For containment	:	Wipe up small amounts with absorbent material such as cloth or pulp. Water and detergent. Absorb with non-flammable liquid binder material (sand, diatomite, universal binders).
6.3.2. For cleanup	:	Wash thoroughly after dealing with the spill. Dispose of contaminated material as waste according to "Disposal Considerations".
6.3.3. Other information	:	Label containers containing waste.

6.4. Reference to other sections

See information in sections 7, 8 и 13.

7. Handling and Storage

7.1. Precautions for safe handling

Precautions	:	Provide good ventilation/extraction at the workplace. Avoid the formation of aerosols. Maintain good professional and personal hygiene. Avoid inhalation and contact with skin and eyes. Wear protective clothing and use safety glasses. Avoid inhalation.
Fire-fighting measures	:	Smoke may combine with air to form an explosive mixture. Wetted solids (e.g. cloth, cellulose, filter panel, binder) should be stored hermetically closed and/or soaked and properly disposed of. Keep ignition sources away - Do not smoke. Protect against electrostatic charges.
Measures to avoid transformation into aerosols and powder	:	Ensure adequate ventilation of the working area.
Environmental precautions	:	Do not allow it to enter drains or water. In case of penetration into water or sewerage, inform the competent authorities.
Advice on general occupational hygiene	:	Wash your hands before breaks and at the end of the working day. Avoid eye and skin contact.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions	:	The requirements related to storage premises apply to all premises where the substance is handled. Store in well-sealed original containers away from sources of ignition and in a cool place. Avoid contact with incompatible materials that support combustion, such as strong oxidizers. Keep away from food and drink, including for animals. Keep away from all sources of ignition - no smoking. Keep away from all sources of ignition, heat and direct sunlight. Avoid the build-up of electrostatic charges.
Packing materials	:	It is packed in galvanized barrels that must be full, or in containers with an internal varnish coating, or glass containers. If you transfer the product it must be in packaging made of identical material to the original.

		Keep containers tightly closed in a dry and well-ventilated place.
Requirements to storage areas or containers	:	Store in a dark, cool and ventilated room and closed containers. Storage at: 5≤ 25 °C.
Storage class	:	No information
Classification according to Betriebssicherheitsverordnung		Flammable liquid
Recommendations for fire and explosion protection	:	Work in well-ventilated areas. Prevent formation of flammable or explosive concentrations in air and avoid vapor concentrations above occupational exposure limits. Never inhale this substance. Prevent the build-up of electrostatic charges with ground connections. Use the mixture in areas free of open flames or other sources of ignition and ensure that electrical equipment is properly protected. Keep packages tightly closed and away from sources of heat, sparks and open flames. Do not use tools that may cause sparks. No smoking. Prevent unauthorized personnel access.
Recommendations for primary storage	:	**It is recommended that the packaging and storage conditions according to ISO/TS 210:2015 are observed.**

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 perfumery and cosmetics by itself or as a formulation constituent, included in a composition.
Additional information:		Follow the regulation relative to the application: • 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).

8. Exposure controls/Personal protection equipment

8.1. Control parameters

Occupational exposure limits on the basis of data base of international limit values GESTIS

(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.

Occupational exposure limits on the basis of data base of international limit values GESTIS

D-Limonene

France *TWA: 1000 mg/m3* *STEL: 1500 mg/m3*	*Germany* *TWA: 5ppm* *STEL: 1500 mg/m3 TWA: 28 mg/m3* *Ceiling / Peak: 20 ppm* *Ceiling / Peak: 112 mg/m3*
Finland *TWA: 25ppm -* *TWA: 140 mg/m3* *STEL: 50ppm* *STEL: 280 mg/m3*	*Switzerland* *TWA: 25ppm -* *TWA: 140 mg/m3* *TEL: 37.5 ppm* *STEL: 175 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)

ENVIRONMENTAL COMPARTMENT: *SOIL.*
PNEC: *0.327MG/KG*

ENVIRONMENTAL COMPARTMENT: *FRESH WATER.*

PNEC:	*0.2MG/L*
ENVIRONMENTAL COMPARTMENT:	*SEA WATER.*
PNEC:	*0.02MG/L*
ENVIRONMENTAL COMPARTMENT:	*INTERMITTENT WASTE WATER.*
PNEC:	*2MG/L*
ENVIRONMENTAL COMPARTMENT:	*FRESH WATER SEDIMENT.*
PNEC:	*2.22MG/KG*
ENVIRONMENTAL COMPARTMENT:	*MARINE SEDIMENT.*
PNEC:	*0.222MG/KG*
ENVIRONMENTAL COMPARTMENT:	*WASTE WATER TREATMENTPLANT.*
PNEC:	*10MG/L*

8.2. Exposition controls

8.2.1. Appropriate engineering control

Measures related to the substance/ mixture to prevent exposure during identified uses : Use personal protective equipment depending on the concentration and quantity of the hazardous substance. Store away from food, drink and feed. Wash hands before breaks and at the end of work. Avoid skin contact. Avoid contact with eyes and skin. Provide an eyewash station. Provide adequate ventilation. Good personal hygiene practices are always recommended, especially when handling chemicals/oils. 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 wash contaminated clothing before reuse. Make sure there is adequate ventilation, especially in enclosed areas.

8.2.2. Personal protective equipment:

8.2.2.1.Eyes and face protection : Tight fitting goggles according to EN 166:2001

8.2.2.2.Skin protection

Hand protection : Preventive skin protection by using skin protection products is recommended.
Protective gloves
The glove material must be impermeable and resistant to the product/substance/preparation. The selection of

glove material is based on penetration time, diffusion rate and degradation.
Material of gloves:
The selection of suitable gloves depends not only on the material, but also on other quality marks and varies from manufacturer to manufacturer. Penetration time of glove material: >480 minutes at 0.425 mm layer thickness (Sol-Vex (37-695)/Ansell). The exact breakthrough time should be obtained from the manufacturer of the protective gloves and should be followed. For permanent contact, gloves made of the following materials are suitable: Nitlile rubber, NBR, e.g. the following product: Sol-Vex (37-695) from Ansell. As protection against splashes, gloves made of the following materials are suitable: Nitlile rubber, NBR.

Body protection : Protective work clothing. Work clothing worn by staff is washed regularly. After contact with the product, all parts of the body that are contaminated should be washed.

8.2.2.3. Respiratory tract protection : A respiratory mask is recommended. Suitable respiratory protection: filter class A2 (brown color). Use the rules of application of respiratory protection systems. In case of short exposure or minor contamination, use a respiratory filter device. In case of intense or prolonged exposure, use self-contained breathing apparatus.

8.2.4. Environmental exposure control: Avoid discharge into drain water. Eliminate only through authorized companies.

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

Appearance/type	:	clear mobile liquid, at 20 ºC and slightly cloudy mobile liquid at -25 ºC after 72 hours.
Colour	:	Yellowish orange to dark orange liquid
Odour	:	sweet, fresh, citrusy, typical of orange peels
Odor threshold	:	No information
pH	:	No information
Freezing point in °C	:	No information
Melting point in °C	:	No information
Boiling point	:	The substance begins to boil at 160 ºC. /Echa dossier/
Boiling point / boiling range	:	No information
Ignition temperature, in °C	:	82°C
Acid value, mgKOH/g	:	No information
Ester value, mgKOH/g	:	No information
Evaporation rate	:	No information
Flammability (solid substance, gas)	:	No information
Upper flammability/explosion limit	:	No information
Lower flammability/explosion limit	:	No information
Vapour pressure at 25°C	:	186.4 Pa /Echa dossier/
Solubility (s)	:	Soluble in carbon sulphide, glacial acetic acid and anhydrous ethyl alcohol.
Insoluble in	:	water / 3.48 - 1767.3 mg/l at 25 ºC. /Echa dossier/
Partition coefficient		

n-octanol/water Log/Pow	:	The octanol-water partition coefficient of the orange oil constituents is above 4.0 for more than 80% of the composition. With a log Kow of 4.83 (foreseen) or 4.38 (measured), limonene represents the high log Kow group. /Echa dossier/
Auto-ignition temperature	:	235 ºC /Echa dossier/
Decomposition temperature	:	No information
Viscosity	:	The dynamic and kinematic viscosities of the substance are 0.99 mPa*s and 1.17 mm^2/s at 20 ºC respectively. /Echa dossier/
Explosive properties	:	No information
Oxidizing properties	:	No information

Other information

Refraction index at 20°C	:	1.468 – 1.478
Relative density at d^{20} at 20°C	:	0.842 до 0.856

No other information available.

10. Stability and Reactivity

10.1. Reactivity

Advice	:	Stable under recommended operating and storage conditions.

10.2. Chemical stability

Note	:	Stable under recommended operating and storage conditions.

10.3. Possible hazardous reactions

Hazardous reactions	:	Formation of an explosive gas mixture with air is possible. In case of unfavorable storage conditions (air leakage, heat build-up) self-ignition of moistened solids (e.g. cloth, cellulose, filter panel, binder) is possible. Reacts violently with oxidizing agents.

10.4. Conditions to avoid

Conditions to avoid	:	Avoid heat, sparks and open flame. Avoid exposure to air.
Thermal decomposition	:	Heating causes evaporation and the formation of a flammable atmosphere is possible.

10.5. Incompatible materials

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

10.6. Hazardous decomposition products

Hazardous decomposition products	:	Hazardous decomposition products are not expected under intended use.

11. Toxicological Information

11.1. Information on toxicological effects

Acute toxicity

Sweet Orange Oil (Echa)
Acute oral toxicity: LD50>5000 mg/kg bw (standard acute method, limit test)
Acute dermal toxicity: LD50>5000 mg/kg bw (standard acute method, limit test)

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

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

Decanal
Oral route: DL50 = 3750 mg/kg

Notes	:	Irritating to skin and mucous membranes. May be harmful if swallowed.

Based on available information, orange oil has been proven to have low acute toxicity when applied orally and dermally. Therefore, the substance orange oil does not need to be classified for acute toxicity according to the criteria set out in Annex I to 1272/2008/EC (CLP/EU-GHS).

Corrosion/Skin irritation

Sweet Orange Oil (Echa)
Skin irritation: does not irritate (OECD404), although some effects have been noted.
Skin irritation: does not irritate (OECD405)

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)

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

Notes : Prolonged contact may cause redness and skin irritation.

Serious damage /Eye irritation

Result : Serious eye damage. May have irreversible effects on the eyes, such as tissue damage in the eye or serious physical deterioration of vision 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.

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

Respiratory or skin sensitization

Sweet Orange Oil (Echa)
Skin irritation: does not irritate (OECD404), although some effects have been noted.
Skin irritation: does not irritate (OECD405)

Note : May cause an allergic skin reaction. Possible sensitization by skin contact

Ingestion

Note : May be harmful if swallowed.

Mutagenicity of germ cells

Note : - Gene mutation in bacteria: (Bacterial Reverse Mutation Assay/Ames) (according to OECD 471): not mutagenic.
- In vitro mammalian chromosomal aberration test (equivalent or similar to OECD 473): not clastogenic without metabolic activation.
- In vitro mammalian cell gene mutation test (according to OECD 476): negative.

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 : /Echa dossier/
Repeated dose toxicity: orally
A weight-of-evidence approach
6-month repeated dose toxicity study in dogs: LOAEL 1000 mg/kg body weight/day
90-day repeated dose toxicity study in mice: LOAEL 1000 mg/kg body weight/day
90-day repeated dose toxicity study in rats: LOAEL 1200 mg/kg body weight/day
supporting 6-month repeated-dose toxicity study in dogs: LOAEL 1000 mg/kg body weight/day

Reproductive toxicity

Note : /Echa dossier/
Developmental toxicity study in rats: no teratogenic effect, maternal and developmental NOAEL 591 mg/kg body weight/day
Developmental toxicity study in rabbits: not teratogenic, maternal NOAEL 250 mg/kg body weight/day, developmental NOEAL 1000 mg/kg body weight/day
Developmental toxicity study in mice: no teratogenic effect, maternal and developmental NOAEL 591 mg/kg body weight/day

Based on the available information, there is no sufficient evidence to classify orange oil for developmental toxicity in accordance with the criteria set out in Annex I of 1272/2008/EC (CLP/EU-GHS).

Aspiration hazard

Note : May be fatal if swallowed and enters the respiratory tract.

Information on possible routes of exposure		
Note	:	No data.

Symptoms related to physical, chemical and toxicological characteristics		
When swallowed	:	vomiting, nausea, gastrointestinal complaints, risk of aspiration
In case of eye contact	:	slightly irritating but not suitable for classification
When inhaled	:	slightly irritating but not suitable for classification
In case of skin contact	:	causes skin irritation, may cause an allergic reaction, itching, local redness

Delayed and immediate effects as well as chronic effects from short and long-term exposure		
Note	:	Exposure to vapors above the specified occupational exposure limit may cause adverse health effects, such as mucosa, membrane and respiratory tract irritation and adverse effects on the kidneys, liver and central nervous system. Repeated or prolonged contact with the substance may result in the removal of natural oil from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. Splashes in the eyes may cause irritation and reversible damage.

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.

Other information

Note : RTECS: RI8600000

11.2. Properties disturbing the functions of the endocrine system

Note : No information available

12. Ecological information

Note : Toxic to aquatic organisms with a long-lasting effect. The product must not be discharged into drains or waterways.

12.1. Toxicity

Product:

Acute (short-term) toxicity:

Fish

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

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

LINALOOL(CAS:78-70-6)

IMMOBILISATION TEST
ALGAE TOXICITY: *DURATION OF EXPOSURE :96H*

ECR50=88.3MG/L
SPECIES :DESMODESMUS SUBSPICATUS
OTHER GUIDELINE

Bacteria		
Note	:	No data

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		
Note	:	no data

Physical and photo-chemical elimination		
Note	:	no data

Biochemical degradation

Note : no data

12.3. Bioaccumulation

Product: Bioaccumulation of the mixture components:

DL-limonene 138-86-3 Log KOW 4,57

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

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

12.6. 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

12.7. 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	Empty contaminated packaging thoroughly. They can be recycled after thorough and proper cleaning. Packaging that cannot be cleaned is disposed of in the same way as the product.
Contaminated solids	Recommendation: Solids (e.g. cloth, cellulose, filter panels, binder) may be incinerated after consultation with the operator of the waste disposal facility and relevant authorities and in accordance with the necessary technical regulations. European waste catalogue: e.g. 15 02 02 Filter and absorbent materials contaminated with hazardous agents.
European Catalogue waste number	* **16 03 05** organic waste containing hazardous substances

13.1.2. Information on waste treatment: Recycling is preferred over disposal or incineration. Disposal must be carried out according to official regulations. It should not be disposed of with household waste. Do not allow product to reach drains.

13.1.3. Information on discharge in sewer systems: Do not allow product to reach drains.

13.1.4. Other recommendations for waste disposal: No data available.

14. UN proper shipping name

1169

14.1. UN proper shipping name

1169 *AROMATIC EXTRACTS LIQUID*

14.2. Transport hazard class(es)

Class 3

14.3. Packing group

III

14.4. Environmental hazards

14.5. Special precautions for user

When loading packages, smoking is prohibited near the vehicles. Check that the packaging is correctly placed in the vehicle and that it is correctly labelled.

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

Road transport

ADR: 1169 *AROMATIC EXTRACTS LIQUID*

RID: 1169 *AROMATIC EXTRACTS LIQUID*

Tunnel Code: (D/E)

Waterway transport

ADN: 1169 *AROMATIC EXTRACTS LIQUID*

Maritime transport

IMDG
1169 *AROMATIC EXTRACTS LIQUID*

EmFS F-E, S-D

Air transport

IATA/CAO
1169 *AROMATIC EXTRACTS LIQUID*

TRAVELLER AIRPLANE PACKING INSTRUCTION 355

TRAVELLER AIRPLANE MAXIMUM QUANTITY 60 L

CARGO AIRPLANE PACKING INSTRUCTION 366

CARGO AIRPLANE MAXIMUM QUANTITY 220 L

Labelling according to RID / ADR, IMCO / IMDG, OACI / IATA
SHIPPING NAME : UN 1169 EXTRACTS, AROMATIC, LIQUID

ENVIRONMENTALLY HAZARDOUS

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.
Permits or restrictions for use	Youth work restriction should be observed

Permissions	Not required
Restrictions on use	No information
Other EU legislative acts	: According to the effective Regulations

Information according to Directive 1999/13/EC on the limitation of emissions of volatile organic compounds (VOC Guide)

Restrictions for use in working environment	No information.
Other legal acts, restrictions and prohibitive standards	No information

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]

Specifying the changes : Classification, change of allergens and additional information about the product based on gas-chromatographic analysis and latest changes.

Abbreviations and acronyms:

Abbreviations	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)
Aquatic Chronic 2	Harmful to aquatic life - chronic hazard
Asp Tox 1	Aspiration hazard
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
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
ЕО № EU List	(EINECS, ELINCS и NLP-list) is the source for the seven-digit EC number, identifier of substances in the commercial network within the EU (European Union)
Index №	the index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008
VOC	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
H411	Toxic to aquatic life with long lasting effects
EUH 208	Contains Limonene, Linalool. May cause an allergic reaction.
	List of safe handling instructions used in the safety document
P102	Keep out of reach of children
P262	Do not get in eyes, on skin, or on clothing.
P233	Keep container tightly closed
P264	Wash hands thoroughly after handling
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310	IF SWALLOWED: Immediately call a doctor
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P302 + P352	IF ON SKIN: Wash with plenty of water/…
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P362 + P364	Remove contaminated clothing and wash before reuse
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.

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.

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 Sweet Orange (Citrus Aurantium Dulcis Peel Oil)

	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*	-	-	-
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*	-	-	-
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*	-	-	-
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*	*95,0*	-	*95,0*
22	*LINALOOL*	*H315*	*78-70-6*	*201-134-4*	*1,0*	-	*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 (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 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