SAFETY DATA SHEET

In accordance with REACH Regulation EC No.1907/2006

Product: Fennel Sweet Essential Oil

Version: 1

Section 1. Identification of the substance or the mixture and of the supplier

1.1 Product Identifier

Product identifier: Fennel Sweet Essential Oil; CAS: 8006-84-6

Other identifiers: Foeniculum Vulgare Oil

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

Product uses: Flavours,Fragrances,Food Use,Cosmetics

1.3 Details of the supplier of the safety data sheet

Company name: Organic Oils Sp. z o. o.

Company address: ul.Nowy Świat 33 lok. 13
00-029 Warszawa
NIP: 9522209175
KRS: 0000858803

Contact: Regulatory Affairs

E-Mail address: kontakt@oilo.pl

Company phone: +48 790 771 201

1.4 Emergency telephone number

Emergency phone: 112

Section 2. Hazards identification

2.1 Classification of the substance or mixture

Classification under Regulation (EC) No 1272/2008

Class and category of danger: Skin Corrosion / Irritation Category 2
Sensitization - Skin Category 1
Germ Cell Mutagenicity Category 2
Carcinogenicity Category 2
Aspiration Hazard Category 1
Hazardous to the Aquatic Environment - Long-term Hazard Category 2
H304, May be fatal if swallowed and enters airways.
H315, Causes skin irritation.
H317, May cause an allergic skin reaction.
H341, Suspected of causing genetic defects (exposure route).
H351, Suspected of causing cancer (exposure route).
H411, Toxic to aquatic life with long lasting effects.

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2.2 Label elements

Classification under Regulation (EC) No 1272/2008

Signal word: Danger

Hazard statements:
H304, May be fatal if swallowed and enters airways.
H315, Causes skin irritation.
H317, May cause an allergic skin reaction.
H341, Suspected of causing genetic defects (exposure route).
H351, Suspected of causing cancer (exposure route).
H411, Toxic to aquatic life with long lasting effects.

M factor: None

Supplemental Information: None

Precautionary statements:
P202, Do not handle until all safety precautions have been read and understood.
P261, Avoid breathing vapour or dust.
P264, Wash hands and other contacted skin 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/eye protection/face protection.
P301/310, IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P302/352, IF ON SKIN: Wash with plenty of soap and water.
P308/313, IF exposed or concerned: Get medical advice/attention.
P331, Do not induce vomiting.
P333/313, If skin irritation or rash occurs: Get medical advice/attention.
P362, Take off contaminated clothing and wash before reuse.
P391, Collect spillage.
P405, Store locked up.
P501, Dispose of contents/container to approved disposal site, in accordance with local regulations.

Pictograms:



2.3 Other hazards

Other hazards: Hydrocarbon Concentration %: 22.9000%

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Section 3. Composition / information on ingredients

3.1 Substances

Product identifier: Fennel Sweet Essential Oil; CAS: 8006-84-6

Contains:

Name	CAS	EC	REACH Registration No.	%	Classification for (CLP) 1272/2008	Specific Conc. Limits, M-factors and ATEs
trans-Anethole	4180-23-8	224-052-0		50-100%	Skin Sens. 1B;H317,-	oral: ATE = 3000 mg/kg bw
alpha-Pinene	80-56-8	201-291-9		10-<20%	Flam. Liq. 3-Acute Tox. 4-Skin Irrit. 2-Skin Sens. 1B-Asp. Tox 1-Aquatic Acute 1-Aquatic Chronic 1; H226-H302-H304-H315-H317-H410,-	M = 1-M = 1-oral: ATE = 500 mg/kg bw
d-Limonene	5989-27-5	227-813-5		5-<10%	Flam. Liq. 3-Skin Irrit. 2-Skin Sens. 1B-Asp. Tox 1-Aquatic Acute 1-Aquatic Chronic 3; H226-H304-H315-H317-H400-H412,-	M = 1
Estragole	140-67-0	205-427-8		5-<10%	Acute Tox. 4-Skin Irrit. 2-Skin Sens. 1B-Muta. 2-Carc. 2-Aquatic Chronic 3;H302-H315-H317-H341-H351-H412,-	oral: ATE = 1230 mg/kg bw
p-Cymene	99-87-6	202-796-7		1-<5%	Flam. Liq. 3-Acute Tox. 3-Repr. 2-Asp. Tox 1-Aquatic Chronic 2; H226-H304-H331-H361-H411,-	inhalation: ATE = 9.7 mg/l (vapour)-oral: ATE = 4750 mg/kg bw
Myrcene	123-35-3	204-622-5		1-<5%	Flam. Liq. 3-Skin Irrit. 2-Eye Irrit. 2-Asp. Tox 1-Aquatic Acute 1-Aquatic Chronic 2; H226-H304-H315-H319-H400-H411,-	M = 1
alpha-Phellandrene	99-83-2	202-792-5		1-<5%	Flam. Liq. 3-Skin Sens. 1-Asp. Tox 1-Aquatic Acute 1-Aquatic Chronic 1;H226-H304-H317-H410,-	M = 1-M = 1
p-Mentha-1,4-diene	99-85-4	202-794-6		0.1-<1%	Flam. Liq. 3-Repr. 2-Asp. Tox 1-Aquatic Chronic 2;H226-H304-H361-H411,-	oral: ATE = 3650 mg/kg bw
cis-Anethole	25679-28-1			0.1-<1%	Skin Sens. 1B;H317,-	oral: ATE = 3000 mg/kg bw
beta-Pinene	127-91-3	204-872-5		0.1-<1%	Flam. Liq. 3-Skin Irrit. 2-Skin Sens. 1B-Asp. Tox 1-Aquatic Acute 1-Aquatic Chronic 1; H226-H304-H315-H317-H410,-	M = 1-M = 1

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1,7,7-Trimethylbicyclo [2.2.1]heptan-2-one	76-22-2	200-945-0		0.1-<1%	Flam. Sol. 2-Acute Tox. 4-Acute Tox. 4-Skin Irrit. 2-Eye Dam. 1-STOT SE 2-STO-SE 2_ROUTE-Aquatic Chronic 2;H228-H302-H315-H318-H332-H371-H411,-	inhalation: ATE = 1.5 mg/l (dusts or mists)-oral: ATE = 1500 mg/kg bw
beta-Caryophyllene	87-44-5	201-746-1		0.1-<1%	Skin Sens. 1B-Asp. Tox 1;H304-H317,-	
Terpinolene	586-62-9	209-578-0		0.1-<1%	Skin Sens. 1B-Asp. Tox 1-Aquatic Acute 1-Aquatic Chronic 1; H304-H317-H410,-	M = 1-M = 1-oral: ATE = 3775 mg/kg bw

Section 4. First-aid measures

4.1 Description of first aid measures

Inhalation: Remove from exposure site to fresh air, keep at rest, and obtain medical attention.

Eye exposure: Flush immediately with water for at least 15 minutes. Contact physician if symptoms persist.

Skin exposure: IF ON SKIN: Wash with plenty of soap and water.

Ingestion: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

4.2 Most important symptoms and effects, both acute and delayed

May be fatal if swallowed and enters airways.

Causes skin irritation.

May cause an allergic skin reaction.

Suspected of causing genetic defects (exposure route).

Suspected of causing cancer (exposure route).

4.3 Indication of any immediate medical attention and special treatment needed

None expected, see Section 4.1 for further information.

Section 5: Firefighting measures

5.1 Extinguishing media

Suitable media: Carbon dioxide, Dry chemical, Foam.

5.2 Special hazards arising from the substance or mixture

In case of fire, may be liberated: Carbon monoxide, Unidentified organic compounds.

5.3 Advice for fire fighters:

In case of insufficient ventilation, wear suitable respiratory equipment.

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Section 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Avoid inhalation. Avoid contact with skin and eyes. See protective measures under Section 7 and 8.

6.2 Environmental precautions:

Keep away from drains, surface and ground water, and soil.

6.3 Methods and material for containment and cleaning up:

Remove ignition sources. Provide adequate ventilation. Avoid excessive inhalation of vapours. Contain spillage immediately by use of sand or inert powder. Dispose of according to local regulations.

6.4 Reference to other sections:

Also refer to sections 8 and 13.

Section 7. Handling and storage

7.1 Precautions for safe handling:

Keep away from heat, sparks, open flames and hot surfaces. - No smoking. Use personal protective equipment as required. Use in accordance with good manufacturing and industrial hygiene practices. Use in areas with adequate ventilation Do not eat, drink or smoke when using this product.

7.2 Conditions for safe storage, including any incompatibilities:

Store in a well-ventilated place. Keep container tightly closed. Keep cool. Ground/bond container and receiving equipment. Use explosion-proof electrical, ventilating and lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

7.3 Specific end use(s):

Flavours,Fragrances,Food Use,Cosmetics: Use in accordance with good manufacturing and industrial hygiene practices.

Section 8. Exposure controls/personal protection

8.1 Control parameters

Workplace exposure limits: Not Applicable

8.2 Exposure Controls

Eye / Skin Protection

Wear protective gloves/eye protection/face protection

Respiratory Protection

Under normal conditions of use and where adequate ventilation is available to prevent build up of excessive vapour, this material should not require special engineering controls. However, in conditions of high or prolonged use, or high temperature or other conditions which increase exposure, the following engineering controls can be used to minimise exposure to personnel: a) Increase ventilation of the area with local exhaust ventilation. b) Personnel can use an approved, appropriately fitted respirator with organic vapour cartridge or canisters and particulate filters. c) Use closed

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systems for transferring and processing this material.

Also refer to Sections 2 and 7.

Section 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State/Colour:	Liquid, colourless to pale yellow
Odour:	Characteristic
Odour threshold:	Not determined
Melting point / freezing point:	Not determined
Boiling point or initial boiling point and boiling range:	Not determined
Flammability:	Not determined
Lower and upper explosion limit:	Not determined
Flash point:	63 °C
Auto-ignition temperature:	Not determined
Decomposition temperature:	Not relevant
pH:	Not determined
Kinematic viscosity:	Not determined
Solubility:	Not determined
Partition coefficient: n-octanol/water (log value):	Not determined
Vapour pressure:	Not determined
Density and/or relative density:	0.9500 - 1.1000
Relative vapour density:	Not determined
Particle characteristics:	Not determined

9.2 Other information: None available

Section 10. Stability and reactivity

10.1 Reactivity:

Presents no significant reactivity hazard, by itself or in contact with water.

10.2 Chemical stability:

Good stability under normal storage conditions.

10.3 Possibility of hazardous reactions:

Not expected under normal conditions of use.

10.4 Conditions to avoid:

Avoid extreme heat.

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10.5 Incompatible materials:
Avoid contact with strong acids, alkalis or oxidising agents.

10.6 Hazardous decomposition products:
Not expected.

Section 11. Toxicological information

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

Acute Toxicity:	Based on available data the classification criteria are not met.
Acute Toxicity Oral	3098
Acute Toxicity Dermal	Not Applicable
Acute Toxicity Inhalation	Not Available
Skin corrosion/irritation:	Skin Corrosion / Irritation Category 2
Serious eye damage/irritation:	Based on available data the classification criteria are not met.
Respiratory or skin sensitisation:	Sensitization - Skin Category 1
Germ cell mutagenicity:	Germ Cell Mutagenicity Category 2
Carcinogenicity:	Carcinogenicity Category 2
Reproductive toxicity:	Based on available data the classification criteria are not met.
STOT-single exposure:	Based on available data the classification criteria are not met.
STOT-repeated exposure:	Based on available data the classification criteria are not met.
Aspiration hazard:	Aspiration Hazard Category 1

Information about hazardous ingredients in the mixture

Ingredient	CAS	EC	LD50/ATE Oral (mg/kg)	LD50/ATE Dermal (mg/kg)	LC50/ATE Inhalation	LC50 Route
Estragole	140-67-0	205-427-8	1230	Not available	Not available	Not available
p-Cymene	99-87-6	202-796-7	4750	Not available	9.7	Vapour mg/l

Refer to Sections 2 and 3 for additional information.

11.2 Information on other hazards

Not Applicable

Section 12. Ecological information

12.1 Toxicity:

Toxic to aquatic life with long lasting effects.

12.2 Persistence and degradability: Not available

12.3 Bioaccumulative potential: Not available

12.4 Mobility in soil: Not available

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12.5 Results of PBT and vPvB assessment:

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

12.6 Endocrine disrupting properties: Not Applicable

12.7 Other adverse effects: Not available

Section 13. Disposal considerations

13.1 Waste treatment methods:

Dispose of in accordance with local regulations. Avoid disposing into drainage systems and into the environment. Empty containers should be taken to an approved waste handling site for recycling or disposal.

Section 14. Transport information

	14.1 UN number or ID number:	14.2 UN Proper Shipping Name:	14.3 Transport hazard class (es):	Sub Risk:	14.4 Packing Group:
UN Model Regulations	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (alpha-Pinene, d-Limonene)	9	-	III
IMDG	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (alpha-Pinene, alpha-Phellandrene) MARINE POLLUTANT	9	-	III
ADR,RID,ADN	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (alpha-Pinene, alpha-Phellandrene)	9	-	III
ICAO TI	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (alpha-Pinene, d-Limonene)	9	-	III

14.5 Environmental hazards: This is classified as an environmentally hazardous substance under the UN Model Regulations. This is classified as a Marine Pollutant under the IMDG Code.

14.6 Special precautions for user: None additional

14.7 Maritime transport in bulk according to IMO instruments:

Not applicable

Section 15. Regulatory information

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

None additional

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out for this product.

Section 16. Other information

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Concentration % Limits: SCI 2=34.60% SS 1=1.26% MUT 2=16.67% CAR 2=16.67% REP 2=61.22% AH 1=43.67% EH A1=88.03% EH C2=15.17% EH C3=1.50% EH C4=63.61%

Total Fractional Values: SCI 2=2.89 SS 1=79.10 MUT 2=6.00 CAR 2=6.00 REP 2=1.63 AH 1=2.29 EH A1=1.14 EH C2=6.59 EH C3=66.48 EH C4=1.57

Key to revisions:

Not applicable

Key to abbreviations:

Abbreviation	Meaning
Acute Tox. 3	Acute Toxicity - Inhalation Category 3
Acute Tox. 4	Acute Toxicity - Oral Category 4
Acute Tox. 4	Acute Toxicity - Inhalation Category 4
Aquatic Acute 1	Hazardous to the Aquatic Environment - Acute Hazard Category 1
Aquatic Chronic 1	Hazardous to the Aquatic Environment - Long-term Hazard Category 1
Aquatic Chronic 2	Hazardous to the Aquatic Environment - Long-term Hazard Category 2
Aquatic Chronic 3	Hazardous to the Aquatic Environment - Long-term Hazard Category 3
Asp. Tox 1	Aspiration Hazard Category 1
Carc. 2	Carcinogenicity Category 2
Eye Dam. 1	Eye Damage / Irritation Category 1
Eye Irrit. 2	Eye Damage / Irritation Category 2
Flam. Liq. 3	Flammable Liquid, Hazard Category 3
Flam. Sol. 2	Flammable Solid, Hazard Category 2
H226	Flammable liquid and vapour.
H228	Flammable solid.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H341	Suspected of causing genetic defects (exposure route).
H351	Suspected of causing cancer (exposure route).
H361	Suspected of damaging fertility or the unborn child (exposure route).
H371	May cause damage to organs (organs, exposure route).
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
Muta. 2	Germ Cell Mutagenicity Category 2

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P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat, sparks, open flames and hot surfaces. - No smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical, ventilating and lighting equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P260	Do not breathe vapour or dust.
P261	Avoid breathing vapour or dust.
P264	Wash hands and other contacted skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/eye protection/face protection.
P301/310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P301/312	IF SWALLOWED: call a POISON CENTER or doctor/physician if you feel unwell.
P302/352	IF ON SKIN: Wash with plenty of soap and water.
P303/361/353	IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
P304/340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305/351/338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308/313	IF exposed or concerned: Get medical advice/attention.
P309/311	IF exposed or if you feel unwell: Call a POISON CENTRE or doctor/physician.
P310	Immediately call a POISON CENTER or doctor/physician.
P311	Call a POISON CENTRE or doctor/physician.
P330	Rinse mouth.
P331	Do not induce vomiting.
P332/313	If skin irritation occurs: Get medical advice/attention.
P333/313	If skin irritation or rash occurs: Get medical advice/attention.
P337/313	If eye irritation persists: Get medical advice/attention.
P362	Take off contaminated clothing and wash before reuse.
P363	Wash contaminated clothing before reuse.
P370/378	In case of fire: Use carbon dioxide, dry chemical, foam for extinction.
P391	Collect spillage.
P403/235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container to approved disposal site, in accordance with local regulations.
Repr. 2	Toxic to Reproduction Category 2
STOT SE 2	Specific Target Organ Toxicity (Single Exposure) Category 2
Skin Irrit. 2	Skin Corrosion / Irritation Category 2
Skin Sens. 1	Sensitization - Skin Category 1

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Skin Sens. 1B	Sensitization - Skin Category 1B

The information in this safety data sheet is to the best of our knowledge true and accurate but all data, instructions, recommendations and/or suggestions are made without guarantee.