

Safety Data Sheet

according to UK REACH Regulation

Fennel oil

Revision date: 15.11.2021

Product code: 1410130

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

1.1. Product identifier

Fennel oil

Substance name: Fennel oil

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

Use of the substance/mixture

Manufacture of cosmetics

Uses advised against

Any non-intended use.

1.3. Details of the supplier of the safety data sheet

Company name:	Satcotek GmbH	
Street:	Gotenstrasse 13	
Place:	D-20097 Hamburg	
Telephone:	+49(0)40-5303669711	Telefax: +49(0)40-5303669766
Internet:	www.satcotek.com	
Responsible Department:	info@satcotek.com	

1.4. Emergency telephone number: Poison Information Center Mainz, Germany, Tel: +49(0)6131/19240

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Hazard categories:

Flammable liquid: Flam. Liq. 3

Carcinogenicity: Carc. 2

Germ cell mutagenicity: Muta. 2

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Irrit. 2

Respiratory or skin sensitisation: Skin Sens. 1

Specific target organ toxicity - single exposure: STOT SE 2

Aspiration hazard: Asp. Tox. 1

Hazardous to the aquatic environment: Aquatic Chronic 1

Hazard Statements:

Flammable liquid and vapour.

Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

Suspected of causing genetic defects.

Suspected of causing cancer.

May cause damage to organs.

May be fatal if swallowed and enters airways.

Very toxic to aquatic life with long lasting effects.

2.2. Label elements

GB CLP Regulation

Hazard components for labelling

Fennel oil

Signal word: Danger

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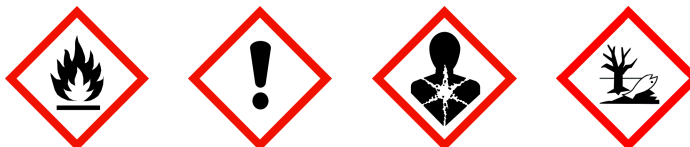
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Pictograms:



Hazard statements

- H226 Flammable liquid and vapour.
- H304 May be fatal if swallowed and enters airways.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H341 Suspected of causing genetic defects.
- H351 Suspected of causing cancer.
- H371 May cause damage to organs.
- H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
- P273 Avoid release to the environment.
- P280 Wear protective gloves and eye/face protection.
- P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
- P331 Do NOT induce vomiting.
- P370+P378 In case of fire: Use Sand. Foam. Carbon dioxide (CO2). Extinguishing powder. Water spray jet to extinguish.
- P391 Collect spillage.
- P403+P235 Store in a well-ventilated place. Keep cool.

2.3. Other hazards

In use, may form flammable/explosive vapour-air mixture.
The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

SECTION 3: Composition/information on ingredients

3.1. Substances

Chemical characterization

INCI: FOENICULUM VULGARE OIL

Hazardous components

CAS No	Chemical name	Quantity		
	EC No	Index No	REACH No	
	GHS Classification			
8006-84-6	Fennel oil			99 - <= 100 %
	282-892-3			
	Flam. Liq. 3, Carc. 2, Muta. 2, Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, STOT SE 2, Asp. Tox. 1, Aquatic Chronic 1; H226 H351 H341 H315 H319 H317 H371 H304 H410			

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

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
8006-84-6	282-892-3	Fennel oil	99 - <= 100 %
	oral: LD50 = 3120 mg/kg		

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Further Information

Product does not contain listed SVHC substances > 0,1 % according to Regulation (EC) No. 1907/2006 Article 59 (REACH)

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Take off immediately all contaminated clothing.

After inhalation

Remove person to fresh air and keep comfortable for breathing. In case of respiratory tract irritation, consult a physician.

After contact with skin

Take off immediately all contaminated clothing. Wash with plenty of water. In case of skin irritation, seek medical treatment.

After contact with eyes

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

After ingestion

Do NOT induce vomiting. Rinse mouth thoroughly with water. Let water be drunken in little sips (dilution effect). Observe risk of aspiration if vomiting occurs. Never give anything by mouth to an unconscious person or a person with cramps. When in doubt or if symptoms are observed, get medical advice. Always assume that aspiration has occurred. Seek professional medical attention or send the casualty to a hospital. Do not wait for symptoms to develop.

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

Inhalation can cause damage to the respiratory tract or lungs.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO₂). Dry extinguishing powder. alcohol resistant foam.
In case of major fire and large quantities: Atomized water.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Can be released in case of fire: Gas/vapours, irritant. Carbon monoxide Carbon dioxide (CO₂).

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus. In case of fire and/or explosion do not breathe fumes.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Use water spray jet to protect personnel and to cool endangered containers.
In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Remove all sources of ignition. Ventilate affected area.

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Do not breathe gas/vapour/aerosol. Avoid contact with skin, eyes and clothes.

For non-emergency personnel

Wear personal protection equipment (refer to section 8).

For emergency responders

No special measures are necessary.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Cover drains. Prevent spread over a wide area (e.g. by containment or oil barriers). In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3. Methods and material for containment and cleaning up

For containment

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).
Treat the recovered material as prescribed in the section on waste disposal.

For cleaning up

Clean contaminated objects and areas thoroughly observing environmental regulations.

Other information

Ventilate affected area.

6.4. Reference to other sections

Safe handling: see section 7

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Provide adequate ventilation as well as local exhaustion at critical locations.
Wear suitable protective clothing. (See section 8.)

Advice on protection against fire and explosion

Keep away from sources of ignition. - No smoking. Take precautionary measures against static discharges.
Flammable vapours can accumulate in head space of closed systems. In use, may form flammable/explosive vapour-air mixture. Heating causes rise in pressure with risk of bursting.

Advice on general occupational hygiene

The usual precautions for handling chemicals should be considered.
Keep away from food, drink and animal feedingstuffs.
Always close containers tightly after the removal of product. Do not eat, drink, smoke or sneeze at the workplace. Wash hands before breaks and after work. Protect skin by using skin protective cream. Take off contaminated clothing.

Further information on handling

General protection and hygiene measures: See section 8.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place. Protect against direct sunlight.
Ensure adequate ventilation of the storage area.
Make sure spills can be contained (e.g. sump pallets or kerbed areas).

Hints on joint storage

Do not store together with: Gas. Explosives. Flammable solids. Pyrophoric liquids and solids. Self-heating substances and mixtures. Substances and mixtures which, in contact with water, emit flammable gases.
Oxidizing liquids. Oxidizing solids. ammonium nitrate. Self-reactive substances and mixtures. Organic peroxides. Non-combustible toxic substances. Radioactive substances. Infectious substances.

Further information on storage conditions

Keep the packing dry and well sealed to prevent contamination and absorption of humidity.

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Protect against: UV-radiation/sunlight. heat. Humidity frost.
storage temperature: 15-25°C

7.3. Specific end use(s)

See section 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Additional advice on limit values

To date, no national critical limit values exist.

8.2. Exposure controls



Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment.

Provide adequate ventilation as well as local exhaustion at critical locations.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses; chemical goggles (if splashing is possible). BS/EN 166

Hand protection

In case of prolonged or frequently repeated skin contact: Wear suitable gloves. (BS EN 374)

Suitable material: Butyl rubber.

Thickness of glove material: 0,5 mm

Breakthrough time >= 480 min. penetration time (maximum wearing period): ~ 120 min. (estimated)

In the case of wanting to use the gloves again, clean them before taking off and air them well. Before using check leak tightness / impermeability.

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection

Wear suitable protective clothing.

Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500 (D).

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.

Respiratory protection necessary at:

Generation/formation of aerosols

Exceeding exposure limit values

Insufficient ventilation

Suitable respiratory protective equipment: Combination filtering device (EN 14387) Type: A/P1-3

The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

Environmental exposure controls

Do not allow uncontrolled discharge of product into the environment.

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SECTION 9: Physical and chemical properties
9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	not determined
Odour:	characteristic

Changes in the physical state

Melting point/freezing point:	not applicable
Boiling point or initial boiling point and boiling range:	not determined
Flash point:	< 60 °C

Explosive properties

In use, may form flammable/explosive vapour-air mixture.

Lower explosion limits:	not determined
Upper explosion limits:	not determined
Auto-ignition temperature:	not determined
Decomposition temperature:	not determined
pH-Value:	not determined
Viscosity / dynamic: (at 40 °C)	not determined
Viscosity / kinematic: (at 20 °C)	not determined
Water solubility:	miscible.
Solubility in other solvents not determined	
Vapour pressure: (at 20 °C)	not determined
Density:	0.9 g/cm ³
Relative vapour density:	not determined

9.2. Other information
Information with regard to physical hazard classes

Oxidizing properties
none.

Other safety characteristics

Solvent separation test:	not determined
Solvent content:	not determined
Solid content:	not determined
Evaporation rate:	not determined

Further Information
SECTION 10: Stability and reactivity
10.1. Reactivity

No information available.

10.2. Chemical stability

The mixture is chemically stable under recommended conditions of storage, use and temperature.

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10.3. Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.
Refer to chapter 10.5.

10.4. Conditions to avoid

Protect against: UV-radiation/sunlight. heat. Moisture.
In use may form flammable/explosive vapour-air mixture.
Heating causes rise in pressure with risk of bursting.

10.5. Incompatible materials

Materials to avoid: Oxidizing agents, strong. Reducing agents, strong. Strong acid. strong alkalis.

10.6. Hazardous decomposition products

Does not decompose when used for intended uses.
Can be released in case of fire: Gas/vapours, irritant. Carbon monoxide Carbon dioxide (CO₂).

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in GB CLP Regulation

Toxicokinetics, metabolism and distribution

No data available.

Acute toxicity

Based on available data, the classification criteria are not met.
The product has not been tested.

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
8006-84-6	Fennel oil				
	oral	LD50 3120 mg/kg	Rat.		

Irritation and corrosivity

Causes skin irritation.
Causes serious eye irritation.

Sensitising effects

May cause an allergic skin reaction. (Fennel oil)

Carcinogenic/mutagenic/toxic effects for reproduction

Suspected of causing genetic defects. (Fennel oil)
Suspected of causing cancer. (Fennel oil)
Reproductive toxicity: Based on available data, the classification criteria are not met.

STOT-single exposure

May cause damage to organs. (Fennel oil)

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

May be fatal if swallowed and enters airways.

Specific effects in experiment on an animal

No data available.

11.2. Information on other hazards

Endocrine disrupting properties

No data available.

SECTION 12: Ecological information

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12.1. Toxicity

The product has not been tested.

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Endocrine disrupting properties

No data available.

12.7. Other adverse effects

No data available.

Further information

Do not allow to enter into surface water or drains.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Dispose of waste according to applicable legislation. Consult the local waste disposal expert about waste disposal. Non-contaminated packages may be recycled. According to (EWC) European Waste Catalogue, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.

Control report for waste code/ waste marking according to (EWC) European Waste Catalogue:

List of Wastes Code - residues/unused products

160305 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products; organic wastes containing hazardous substances; hazardous waste

List of Wastes Code - used product

160305 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products; organic wastes containing hazardous substances; hazardous waste

List of Wastes Code - contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

<u>14.1. UN number or ID number:</u>	UN 1993
<u>14.2. UN proper shipping name:</u>	FLAMMABLE LIQUID, N.O.S. (Fennel oil)
<u>14.3. Transport hazard class(es):</u>	3
<u>14.4. Packing group:</u>	III
Hazard label:	3

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Classification code: F1
 Special Provisions: 274 601
 Limited quantity: 5 L
 Excepted quantity: E1
 Transport category: 3
 Hazard No: 30
 Tunnel restriction code: D/E

Inland waterways transport (ADN)

14.1. UN number or ID number: UN 1993
14.2. UN proper shipping name: FLAMMABLE LIQUID, N.O.S. (Fennel oil)
14.3. Transport hazard class(es): 3
14.4. Packing group: III
 Hazard label: 3



Classification code: F1
 Special Provisions: 274 601
 Limited quantity: 5 L
 Excepted quantity: E1

Marine transport (IMDG)

14.1. UN number or ID number: UN 1993
14.2. UN proper shipping name: FLAMMABLE LIQUID, N.O.S. (Fennel oil)
14.3. Transport hazard class(es): 3
14.4. Packing group: III
 Hazard label: 3



Marine pollutant: YES
 Special Provisions: 223, 274, 955
 Limited quantity: 5 L
 Excepted quantity: E1
 EmS: F-E, S-E

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: UN 1993
14.2. UN proper shipping name: FLAMMABLE LIQUID, N.O.S. (Fennel oil)
14.3. Transport hazard class(es): 3
14.4. Packing group: III
 Hazard label: 3



Special Provisions: A3
 Limited quantity Passenger: 10 L

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Passenger LQ:	Y344	
Excepted quantity:	E1	
IATA-packing instructions - Passenger:		355
IATA-max. quantity - Passenger:		60 L
IATA-packing instructions - Cargo:		366
IATA-max. quantity - Cargo:		220 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: Yes



Danger releasing substance: Fennel oil

14.6. Special precautions for user

See section 8.

14.7. Maritime transport in bulk according to IMO instruments

not relevant.

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 40

2010/75/EU (VOC): No information available.

2004/42/EC (VOC): No information available.

Information according to 2012/18/EU (SEVESO III): E1 Hazardous to the Aquatic Environment

Additional information: P5c

Additional information

Safety Data Sheet according to UK-REACH Regulation

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

UK REACH Appendix XVII, No (mixture): 3, 40

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Water hazard class (D): 3 - highly hazardous to water

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:

SECTION 16: Other information

Changes

Rev. : 1,0 - 15.11.2021

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

CAS: Chemical Abstracts Service

CLP: Classification, Labelling and Packaging of substances and mixtures

DNEL: Derived No Effect Level

d: day(s)

EINECS: European INventory of Existing Commercial chemical Substances

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ELINCS: European List of Notified Chemical Substances
 ECHA: European Chemicals Agency
 EWC: European Waste Catalogue
 IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
 ICAO: International Civil Aviation Organization
 ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
 GHS: Globally Harmonized System of Classification and Labelling of Chemicals
 GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)
 h: hour
 LOAEL: Lowest observed adverse effect level
 LOAEC: Lowest observed adverse effect concentration
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 NOAEL: No observed adverse effect level
 NOAEC: No observed adverse effect concentration
 NLP: No-Longer Polymers
 N/A: not applicable
 OECD: Organisation for Economic Co-operation and Development
 PNEC: predicted no effect concentration
 PBT: Persistent bioaccumulative toxic
 RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
 REACH: Registration, Evaluation, Authorisation of Chemicals
 SVHC: substance of very high concern
 TRGS: Technische Regeln für Gefahrstoffe
 UN: United Nations
 VOC: Volatile Organic Compounds

Relevant H and EUH statements (number and full text)

H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H341	Suspected of causing genetic defects.
H351	Suspected of causing cancer.
H371	May cause damage to organs.
H410	Very toxic to aquatic life with long lasting effects.

Further Information

Classification according to Regulation (EC) No 1272/2008 [CLP] - Classification procedure:
 Health hazards: Calculation method.
 Environmental hazards: Calculation method.
 Physical hazards: On basis of test data and / or calculated and / or estimated.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.