

SunRose Aromatics, LLC
1120 Dean Avenue
Bronx, N.Y. 10465
(718)-794-0391

www.sunrosearomatics.com

SunRose112@AOL.Com

MATERIAL SAFETY DATA SHEET

Product Name: **Fennel oil, sweet**

Botanical Name: **Foeniculum var. dulce**

Country of Origin: **Egypt**

Family: **Apiaceae**

Section 1. Composition/Information of Ingredients

Method of Extraction: By steam distillation of *Foeniculum vulgare* Mill. var *ducle* d.c. Alef.

CAS No: 84455-29-8/8006-84-6

FEMA: 2483

H-No: 3301.29

CoE: 200

FDA: 182.20

RIFM: monograph

IFRA: not restricted

EINECS: 282-892-3

Status: natural

FFCIV: official

Section 2. Hazards Identification

Concentrated product. Do not ingest. Observe good housekeeping procedures.

Section 3. First Aid Measures

INHALATION: Remove to fresh air. Keep at rest. Obtain medical attention.

EYE CONTACT: Rinse immediately with plenty of water for at least 15 mins. Contact a doctor if symptoms persist.

SKIN CONTACT: Remove contaminated clothes. Wash thoroughly with soap and water, flush with plenty of water. If irritation persists, seek medical advice.

INGESTION: Rinse mouth out with water. Seek medical advice immediately.

OTHER: When assessing action take Risk & Safety Phrases into account (Section 15).

Section 4. Fire Fighting Measures

EXTINGUISHING MEDIA RECOMMENDED: Use CO₂, Dry Powder or Foam type of extinguishers, spraying extinguishing media to base of flames. Do not use direct water jet on burning material.

SPECIAL MEASURES: Avoid vapor inhalation. Keep away from sources of ignition. Do not smoke. Wear positive pressure self-contained breathing apparatus & protective clothing. Avoid

strong oxidizing agents.

EXTINGUISHING PROCEDURES: Closed containers may build up pressure when exposed to heat and should be cooled with water spray.

Section 6. Accidental Release Measures

PERSONAL PRECAUTIONS: Avoid inhalation & direct contact with skin & eyes. Use individual protective equipment (safety glasses, water-proof boots, suitable protective clothing) in case of major spillages.

ENVIRONMENT PRECAUTIONS: Keep away from drains, soils, surface & groundwaters.

CLEANING UP METHODS FOR SPILLAGE: Remove all potential ignition sources. Contain spilled material. Cover with an inert or non-combustible inorganic absorbent material, or sweep up and remove to an approved disposal container. Observe state, federal & local disposal regulations.

Section 7. Handling & Storage

PRECAUTIONS IN HANDLING: Apply good manufacturing practice & industrial hygiene practices, ensuring proper ventilation. Observe good personal hygiene, and do not eat, drink or smoke whilst handling.

STORAGE CONDITIONS: Store in tightly closed original container, in a cool, dry and ventilated area away from heat sources & protected from light. Keep air contact to a minimum.

FIRE PROTECTION: Keep away from ignition sources & naked flames. Take precautions to avoid static discharges in working area.

Section 8. Exposure Controls/Personal Protection

RESPIRATORY PROTECTION: Avoid breathing product vapor. Apply local ventilation where possible.

VENTILATION: Ensure good ventilation of working area.

HAND PROTECTION: Avoid all skin contact. Use chemically resistant gloves if required.

EYE PROTECTION: Use safety glasses.

WORK/HYGIENE PRACTICES: Wash hands with soap & water after handling.

Section 9. Physical and Chemical Properties

COLOUR: Colourless to pale yellow

APPEARANCE: Mobile liquid

ODOUR: Characteristic of plant

FLAVOUR:

FLASH-POINT °C: 63

RELATIVE DENSITY @ d_{20}^{20} : 0.9610 to 0.9770

OPTICAL ROTATION @ 20°C: +11 to +24

REFRACTIVE INDEX @ 20°C: 1.5280 to 1.5430

SOLUBILITY IN 80% ETHANOL @ 20°C: 1+5 soluble: opalescence allowable

SOLUBILITY IN VEGETABLE OILS: Soluble

SOLUBILITY IN WATER: Insoluble

ADDITIONAL DATA:

TYPICAL ANALYSIS BY GC/MS: α -pinene 2.16%; camphene 0.05%; β -pinene 0.18%; sabinene 0.07%; β -phellandrene 2.84%; δ -3-carene 0.05%; limonene 3.38%; α -phellandrene 0.94%; Z- β -ocimene 0.22%; E- β -ocimene 0.08%; γ -terpinene 0.87%; P-cymene 7.44%;

terpinolene 0.17%; fenchone 17.40%; fenchyl acetate 0.43%; camphor 0.18%; linalol 0.24%; linalyl acetate 0.42%; α -terpineol TR; terpinen-4-OL 0.07%; methyl chavicol 6.48%; CIS-anethole 0.48%; TR-anethole 59.97%; P-anisaldehyde 1.21%

Section 10. Stability & Reactivity

REACTIVITY: It presents no significant reactivity hazards, by itself or in contact with water. Avoid contact with strong acids, alkali or oxidizing agents.

DECOMPOSITION: Liable to cause smoke & acid fumes during combustion: carbon monoxide, carbon dioxide & other non-identified organic compounds may be formed.

Section 11. Toxicological Information

Acute Oral rat LD50: >2g/kg. RIFM monograph (1974) FCT, **12**, 879 (1976) & FCT **17**, 529.

Weak estrogenic activity noted: M. Albert-Puleo: J. Ethnopharmacol. **2**, 337 (1980)

Section 12. Ecological Information

BIODEGRADABILITY: Data not available

PRECAUTIONS: Prevent surface contamination of soil, ground & surface water.

Section 13. Disposal Considerations

Avoid disposing to drainage systems and into the environment. Seek expert advice.

Section 14. Transport Regulations

Road (ADR/RID):

Air (IATA):

Sea (IMDG):

UN 1993:

Section 15. Regulatory Information

ACCORDING TO DIRECTIVE 88/379/EEC

HAZARDS:

SYMBOLS:

RISK PHRASES:

SAFETY PHRASES:

Section 16. Other Information

Section 17. Packaging

Type	Suitability
Glass	Yes
Lacquer Lined steel/tin	Yes
Aluminum	Yes
HPPE	No
F/HDPE	Yes

Type	Suitability
Other plastic	No

Section 18. Shelf Life

Min 12 months when stored within advised conditions.

Section 19. Requirements

In-line with general product specification. Always satisfy suitability for specific application.
Retest after 6 months.

Section 20. Disclaimer

The information contained herein is based on data considered accurate and reliable. However, the data is provided without any warranty, expressed or implied regarding its correctness or accuracy. It is the users responsibility both to determine safe conditions for use of this product, and to assume liability for loss, injury, damage, or expense resulting from the improper use of this product.