

*Certificate Of Analysis Sheet*  
**FENNEL SWEET ESSENTIAL OIL**  
*FOENICULUM VULGARE MILL VAR DULCE*

Botanical Origin: UNITED STATES	Lot#: 9585
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**Product Information**

Extraction Method: STEAM DISTILLED	Parts Used: SEED
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Quality: 100% PURE & NATURAL	Cultivation: Cultivated Beds.
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Shelf Life: 2 YEARS			
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**Analysis Specifications**

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Parameter.....Method.....Specification.....Result
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Appearance.....organoleptic.....colorless to slightly.....equivalent  
.....yellow, mobile liquid.....

Aroma.....organoleptic.....characteristic.....equivalent.....

Refractive Index at 20°C.....EP 2011, 2.2.6.....1.530/1.550.....1.5379

Optical Rotation at 20°C.....EP 2011, 2.2.7.....+5\*to +20\*.....+15.2\*

Specific Gravity At 20°C.....EP 2011, 2.2.5.....0.950/0.970.....0.9626

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Quantitative Analysis.....EP 2011, 2.2.28.....(GC-Area%).....(GC-Area%)
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-alpha-Pinene.....1/7.....52

-Limonene.....3/8.....5.7

-Fenchone.....max.6.....5.8

-Methylchavicol.....max.6.....3.0

-cis-Anethol.....max.0.5.....0.1

-trans-Anethol.....70/80.....74.6

-Anisaldehyde.....max.2.....0.1

Shelf Life: 24 months with proper storage

## *Material Safety Data Sheet*

Info	Identification
FEMA No	N/A
CAS No.	N/A
Chemical Name	
Health	
Flammability	
Reactivity	
Info	Fire, Explosion & Reactivity
Flash Point	175.5 F
Extinguishing Media	FOG-No   CO2-Yes   FOAM-Yes   DRY-Yes
Dot Classification	N/A
Stability	
NFPA Classification	N/A
Fire Fighting	N/A
Unusual Fire Hazard	N/A
Hazardous Combustible	Carbon monoxide and unidentified organics compounds may be formed during combustion.
Decomposition Products	
Info	Physical Data
Color & Odor	Clear, Pale yellow liquid
Boiling Point	175.5
Melting Point	N/A
Vapor Pressure	N/A
Vapor Density	N/A
Water Solubility	COMPLIES
Info	Protection Data
Respiratory	Avoid breathing directly on the product. Apply local ventilations when appropriate.
Ventilation	Ensure good ventilation of the workstation.
Skin	Avoid skin contact. Use chemical resistant gloves as needed.
Eye	Use safety glasses.
Other	Wash hands with soap & water after handling.
Info	Occupational Exposure Limit
Threshold Limit OSHA Permissible	N/A

Limit  
Carcinogen N/A  
NTP Limit N/A  
IARC Limit N/A  
OSHA Limit N/A  
Carcinogen  
Notes N/A

Info

Material Type  
Health Hazard  
Primary Entry  
Routes  
Health Hazard  
Notes

Health Hazards

Info

Inhalation

Eye Contact

Skin Contact

Ingestion

First Aid Notes

Info

Spill Procedures

Waste Disposal

Info

Handling &  
Shipping  
Procedures

Emergency First Aid

REMOVE FROM EXPOSURE SITE TO FRESH AIR AND KEEP AT REST. OBTAIN-MEDICAL ADVICE.

RINSE IMMEDIATELY WITH PLENTY OF WATER FOR 10 MINUTES AT LEAST.-CONTACT A PHYSICIAN IF SYMPTOMS PERSIST.

WASH THOROUGHLY WITH SOAP AND WATER, FLUSH WITH PLENTY OF WATER.-TAKE OFF SPOILT CLOTHES. CONTACT A PHYSICIAN IF SYMPTOMS-PERSIST.

WASH MOUTH WITH WATER, SEEK MEDICAL ADVICE IMMEDIATELY.

Spill, Leakage & Disposal Procedures

CONTAIN SPILLED MATERIAL WITH AN INERT, NONCOMBUSTIBLE, INORGANIC ABSORBENT-MATERIAL OR SWEEP UP AND REMOVE TO AN APPROVED DISPOSAL CONTAINER. AVOID-OPEN FLAMES OR OTHER SOURCES OF IGNITION.

Handling & Shipping Procedures

Apply according to good manufacturing and industrial hygiene practices with proper ventilation. Do not drink, eat or smoke while handling. Respect good personal hygiene. Store in a cool, dry and ventilated area away from heat sources and protected from light in a tightly closed original container. Keep air contact to a minimum. Keep away from ignition sources and naked flame.