



SAFETY DATA SHEET

GHS: According to 2015/830/EU

Code Number: EO100550

Version 2 Revised 25/03/2020

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

1.1 Product Identifier

Product Name	FENNEL ESSENTIAL OIL - SWEET ABP
Code Number	EO100550 - EOFEN
Alternative Name	Foeniculum Vulgare Dulce Fruit Oil
REACH Reg No	Not registered

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

Concentrated material for manufacturing purposes only

1.3 Details of the supplier of the safety data sheet

Pure Ingredients Ltd
626A Rosebank Road, Avondale
Auckland 1026
New Zealand

Telephone Number +09 813 5619

Email Address compliance@pureingredients.co.nz

1.4 Emergency Tel No 111 / NZ Poisons Centre **0800 POISON** (0800 764 766)
Emergency Response: 0800 CHEMCALL / 0800 243 622 (24hr)

Section 2. Hazard Identification

2.1 Classification of the substance or mixture

FL 4*(3.1D)	Flammable liquid, category 4
ATO 4*(6.1D)	Acute toxicity, oral, category 4
AH 1*(6.1E)	Aspiration hazard, category 1
SCI 3*(6.3B)	Skin corrosion/irritation, category 3
SS 1*(6.5B)	Skin sensitisation, category 1
MUT 2*(6.6B)	Germ cell mutagenicity, category 2
CAR 2*(6.7B)	Carcinogenicity, category 2
EH A2*(9.1D)	Aquatic hazard, acute, category 2
EH C3*(9.1C)	Aquatic hazard, chronic, category 3

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2.2 Label elements

GHS classification according to Regulation (EC) No 1272/2008

Hazard Pictograms



Signal Word Danger

Hazard Statements

H227	Combustible liquid
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H316	Causes mild skin irritation
H317	May cause an allergic skin reaction
H341	Suspected of causing genetic defects
H351	Suspected of causing cancer
H401	Toxic to aquatic life
H412	Harmful to aquatic life with long lasting effects

Precautionary Statements

P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261	Avoid breathing fumes.
P264	Wash hands thoroughly after handling
P273	Avoid release to the environment.
P280	Wear protective gloves and eye protection
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302+P352	IF ON SKIN: Wash with plenty of water.

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P308+P313	IF exposed or concerned: Get medical advice.
P333+P313	If skin irritation or rash occurs: Get medical advice.
P403+P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents and container in accordance with local regulation.

2.3 Other Hazards

Contains Limonene which may produce an allergic reaction

No further information available at this time

Section 3. Composition / information on ingredients

Any percentage values listed here for hazardous components are for illustrative purposes only

3.1 Substances

Description	FENNEL OIL SWEET
EC/EINECS	282-892-3
CAS Number	84455-29-8
USCAS Number	8006-84-6

Hazardous components

ID Numbers	Chemical Name, Classification and Hazards	Conc (%)
CAS 4180-23-8 EINECS 224-052-0 REACH	trans-Anethole ATO 5(3000); SCI 3; SS 1B; EH A2 H303, H316, H317, H401	77.4000
CAS 5989-27-5 EINECS 227-813-5 REACH	d-Limonene (p-Mentha-1,8-diene) FL 3; SCI 2; SS 1B; AH 1; EH A1, C1 H226, H304, H315, H317, H400, H410	6.4000
CAS 1195-79-5 EINECS 214-804-6 REACH	Fenchone FL 4; SCI 3 H227, H316	6.1000
CAS 80-56-8 EINECS 201-291-9 REACH	Pinenes FL 3; ATO 4; AH 1; SCI 2; EH A1, C1 H226, H302, H304, H315, H400, H410	5.7000
CAS 140-67-0 EINECS 205-427-8 REACH	Estragole (Methyl chavicol) FL 4; ATO 4(1230); SCI 3; SS 1B; CAR 2; MUT 2 H227, H302, H316, H317, H341, H351	3.0000
CAS 99-83-2 EINECS 202-792-5 REACH	alpha-Phellandrene FL 3; SCI 3; AH 1 H226, H304, H316	1.7000

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CAS 123-35-3 EINECS 204-622-5 REACH	beta-Myrcene FL 3;AH 1;SCI 2;EDI 2A H226,H304,H315,H319	0.7000
CAS 99-87-6 EINECS 202-796-7 REACH	para-Cymene FL 3;ATO 5(4750);SCI 3;AH 1;EH A2,C2 H226,H303,H304,H316,H401,H411	0.4000
CAS 123-11-5 EINECS 204-602-6 REACH	Anisaldehyde (p-Methoxybenzaldehyde) ATO 4(1500);SCI 3;EH A3 H302,H316,H402	0.1000
CAS 13877-91-3 EINECS 237-641-2 REACH	Ocimene (3,7-Dimethyl-1,3,6-octatriene) FL 3;AH 1;SCI 3 H226,H304,H316	0.1000

Refer to section 16 for the wording of listed classification and hazard statement codes

Section 4. First Aid measures

Take phrases in sections 2 into account

4.1 Description of first aid measures

After inhalation

No adverse effects anticipated if inhaled. If fumes or combustion products are inhaled, remove to fresh uncontaminated air, lay patient on back until breathing returns to normal. Seek medical advice if necessary.

After skin contact

Irritating to skin, may cause an allergic skin reaction. Remove contaminated clothing and wash thoroughly with soap and water. Seek medical advice if irritation persists or there are any signs of tissue damage.

After eye contact

No known adverse effects from temporary contact with eyes. Flush eyes with plenty of water for 15 minutes including under eyelid and obtain medical advice if irritation persists. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

After ingestion

Harmful if swallowed, may be fatal if product enters airways. Do NOT induce vomiting. Position to avoid aspiration should vomiting occur. Wash mouth with plenty of water and obtain medical advice immediately.

4.2 Most important symptoms and effects, both acute and delayed

Take phrases in sections 2 and 11 into account. No further information available at this time.

4.3 Indication of immediate medical attention and special treatment needed

Treat symptomatically.

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Section 5. Fire-fighting measures

5.1 Extinguishing Media

Carbon dioxide, foam or dry powder
DO NOT USE A DIRECT WATER JET.

5.2 Special hazards arising from the substance or mixture

May produce Carbon dioxide and unidentified organic compounds.

5.3 Advice for fire-fighters

Wear Self-Contained Breathing Apparatus (S.C.B.A.) and full protective clothing to minimise skin exposure. Avoid inhalation of vapours. Keep containers cool with water spray. Do not use direct water jet on burning material. Do not allow spillage of fire to enter drains or watercourses.

HazChem Code N/A

Section 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Remove all sources of ignition. Avoid inhalation, skin and eye contact. Ensure proper ventilation. Evacuate all unnecessary personnel. If possible contain the spill.

6.2 Environmental precautions

Do not discharge directly into drains or the soil. Keep away from surface and ground water

6.3 Methods and material for containment and cleaning up

Soak up spillage with sand or other inert absorbant material such as earth or vermiculite; transfer used material to a suitable waste container and dispose in accordance with regulations. If large quantities of this material enter the waterways, contact the EPA or your local Waste Management Group.

6.4 Reference to other sections

Refer to information in Sections 7, 8 and 13

Section 7. Handling and storage

7.1 Precautions for safe handling

Maintain good occupational and personal hygiene. Avoid inhalation and contact with skin and eyes. Wear protective clothing and use safety glasses. Keep in original container or an alternative made from a compatible material.

7.2 Conditions for safe storage, including any incompatibilities

Store in tightly sealed original containers away from ignition sources and in a cool place. Avoid contact with incompatible materials that support combustion, such as strong oxidising agents.

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7.3 Specific end use(s)

No further information available

Section 8. Exposure controls / personal protection

8.1 Control Parameters

No exposure standards have been established for this material by Work safe Australia. However as a matter of course avoid repeated or prolonged contact with the skin. Keep out of eyes. Do not ingest. Use with good ventilation, do not breathe vapour. Sensitive individuals may develop an allergic response.

8.2 Exposure controls

Engineering controls

Natural ventilation should be sufficient, however where vapours or mists are generated the use of a grounded mechanical exhaust ventilation system is recommended.

Individual protection measures

Refer to Section 5 for specific fire/chemical personal protective equipment advice. Always wash routinely before breaks, meals and at the end of the work period.

Eye/face protection

Use splash-proof safety glasses and face shield where splashing is possible.

Hand protection

Wear chemically resistant disposable gloves.

Other skin protection

Wear overalls. Depending on conditions in the workplace, additional body protection should be considered. Always wash routinely before breaks, meals and at the end of the work period.

Respiratory protection

Not generally required. Use inhalation protection in poorly ventilated areas

Thermal hazards

No information

Environmental exposure controls

Emissions from ventilation and process equipment should be checked to ensure compliance with environmental protection legislation.

National Exposure Standards

No exposure standards have been established for this material by Worksafe Australia.

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Biological Limit Values
No biological limit allocated.

Section 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

FLASH POINT (°C)	69
APPEARANCE	Mobile liquid
COLOUR	Colourless to pale yellow
ODOUR	Very sweet, slightly peppery-spicy, aromatic, anise-like
ODOUR THRESHOLD	Not available
pH @20 DEG C	Not available
MELTING/FREEZING POINT	5 deg C
INITIAL BOILING POINT AND RANGE	227 deg C
EVAPORATION RATE	Not available
FLAMMABILITY (SOLID/GAS)	Not available
UPPER/LOWER FLAMMABILITY LIMITS	Not available
VAPOUR PRESSURE	Not available
VAPOUR DENSITY	Not available
SPECIFIC GRAVITY @ 20 deg C	0.953 to 0.984
SOLUBILITIES	Insoluble in water
PARTITION COEFF N-OCTANAL/WATER	Not available
AUTO-IGNITION TEMPERATURE	Not available
DECOMPOSITION TEMPERATURE	Not available
VISCOSITY @ 20 DEG C	Not available
EXPLOSIVE PROPERTIES	Not available
OXIDISING PROPERTIES	Not available

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9.2 Other information

No further information available

Section 10. Stability and reactivity

10.1 Reactivity

Not determined

10.2 Chemical Stability

Stable under the recommended storage conditions (see section 7).

10.3 Possibility of hazardous reactions

No hazardous reactions if stored under suitable storage conditions.

10.4 Conditions to avoid

Avoid exposure to heat, sources of ignition, and open flame. Avoid exposure to air.

10.5 Incompatible materials

Keep away from oxidising agents and from highly alkaline or acidic material.

10.6 Hazardous decomposition products

During combustion may form carbon monoxide, carbon dioxide and unidentified organic compounds.

Section 11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Harmful if swallowed.

LD50 oral (rat) - 3120 mg/kg

LD50 dermal (rabbit) - >5000 mg/kg

Skin corrosion / irritation

Causes mild skin irritation.

Serious eye damage / irritation

May irritate eyes.

Respiratory or skin sensitisation

May cause an allergic skin reaction.

Germ cell mutagenicity

Suspected of causing genetic defects.

Carcinogenicity

Suspected of causing cancer.

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Reproductive toxicity

No data

STO-single exposure

No data

STO-repeated exposure

No data

Aspiration hazard

May be fatal if swallowed and enters airways.

Information on likely routes of exposure

No data

Symptoms related to the physical, chemical and toxicological characteristics

No data

Delayed and immediate effects as well as chronic effects from short and long-term exposure

No data

Interactive effects

No data

Other information

No data

Section 12. Ecological information

12.1 Toxicity

Toxic to aquatic life. Harmful to aquatic life with long lasting effects. Avoid contaminating waterways.

d-Limonene (5989-27-5)

LC50 fish 1(Lethal) - Pimephales promelas (fathead minnow) – 720µg/L – 96 h

EC50 (GLP) - Daphnia magna – 0.36mg/L – 48 h

Threshold limit 1 (GLP) - Desmodesmus subspicatus (green algae) – 150mg/L – 72 h

12.2 Persistence and degradability

No data

12.3 Bioaccumulative potential

No data

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12.4 Mobility in soil

Prevent contamination of soil, ground and surface water.

12.5 Results of PBT and vPvB assessment

No data

12.6 Other adverse effects

See sections 6, 7, 13 and 15.

Section 13. Disposal considerations

Please refer to the information in section 8 (Exposure controls and personal protection)

13.1 Waste treatment methods

Dispose in accordance with the law and local regulations. Treat as trade effluent.

Section 14. Transport information

14.1 UN number Not Regulated

14.2 UN proper shipping name Not Restricted

14.3 Transport hazard class(es)

14.4 Packing group

Tunnel Code

14.5 Environmental Hazards

No relevant information available

14.6 Special precautions for user

No relevant information available

HazChem Code N/A

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable

Section 15. Regulatory information

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

Poison Schedule: S5 CAUTION

HS tariff code: 3301.29.00

HSNO Approval Number: HSR002513

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out

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Section 16. Other information

Full list of precautionary phrases

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261	Avoid breathing fumes.
P264	Wash hands thoroughly after handling
P270	Do not eat, drink or smoke when using this product.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves and eye protection
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302+P352	IF ON SKIN: Wash with plenty of water.
P308+P313	IF exposed or concerned: Get medical advice.
P310	Immediately call a POISON CENTRE.
P312	Call a POISON CENTRE if you feel unwell.
P333+P313	If skin irritation or rash occurs: Get medical advice.
P362+P364	Take off all contaminated clothing and wash it before reuse.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents and container in accordance with local regulation.

Wording of any hazard classes listed in section 3

FL 3	Flammable liquid, category 3
FL 4	Flammable liquid, category 4
ATO 4	Acute toxicity, oral, category 4
ATO 5	Acute toxicity, oral, category 5
AH 1	Aspiration hazard, category 1
SCI 2	Skin corrosion/irritation, category 2
SCI 3	Skin corrosion/irritation, category 3
SS 1B	Skin sensitisation, category 1B

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EDI 2A	Eye damage/irritation, category 2A
MUT 2	Germ cell mutagenicity, category 2
CAR 2	Carcinogenicity, category 2
EH A1	Aquatic hazard, acute, category 1
EH A2	Aquatic hazard, acute, category 2
EH A3	Aquatic hazard, acute, category 3
EH C1	Aquatic hazard, chronic, category 1
EH C2	Aquatic hazard, chronic, category 2

Wording of any hazard statements listed in section 3

H226	Flammable liquid and vapour
H227	Combustible liquid
H302	Harmful if swallowed
H303	May be harmful if swallowed
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H316	Causes mild 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
H400	Very toxic to aquatic life
H401	Toxic to aquatic life
H402	Harmful to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects

References and further information

KEY:

N/A = Not applicable

Version 1: GHS format, BV 17/03/2017

Version 2: System update, BV 25/03/2020

Authorised by: JJ 25/03/2020

The information contained in this Safety Data Sheet is obtained from current and reliable sources. Pure Ingredients Ltd provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This Safety Data Sheet summarises our best current knowledge of the health and safety hazard information of the product, but does not claim to be all inclusive. This document is intended only as a guide to the appropriate handling of this material.