

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

1.1. Product identifier

Product form : Substance
Substance name : BASIL OIL, ESTRAGOLE TYPE
EC-No. : 283-900-8
CAS-No. : 84775-71-3
Product code : 11624

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

1.2.1. Relevant identified uses

Main use category : Industrial use

1.2.2. Uses advised against

Restrictions on use : Ultimate consumer use

1.3. Details of the supplier of the safety data sheet

Manufacturer/Supplier

FROMA ESANS ve AROMA SANAYI TICARET A.S
Orhangazi Mah.İsıso San. Sit. 5.Yol Sok.No:23-25-27
34538 Esenyurt-Istanbul-TR
kalite@froma.com.tr

Further information obtainable from: Quality Assurance&Quality Control Department

1.4. Emergency telephone number

Emergency number : +90 212 623 02 90
(Mon - Fri, 08:30 - 18:30 GMT+3)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity (oral), Category 4	H302
Skin corrosion/irritation, Category 2	H315
Skin sensitisation, Category 1	H317
Germ cell mutagenicity, Category 2	H341
Carcinogenicity, Category 2	H351
Hazardous to the aquatic environment — Chronic Hazard, Category 3	H412
Full text of H statements : see section 16	

Adverse physicochemical, human health and environmental effects

Suspected of causing cancer. Suspected of causing genetic defects. Harmful if swallowed. May cause an allergic skin reaction. Harmful to aquatic life with long lasting effects.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS07

GHS08

Signal word (CLP) :

Warning

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Hazard statements (CLP)	: H302 - Harmful if swallowed. H315 - Causes skin irritation. H317 - May cause an allergic skin reaction. H341 - Suspected of causing genetic defects. H351 - Suspected of causing cancer. H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements (CLP)	: P201 - Obtain special instructions before use. P261 - Avoid breathing dust/fume/gas/mist/vapours/spray. P264 - Wash hands, forearms and face thoroughly after handling. P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. P308+P313 - IF exposed or concerned: Get medical advice/attention. P321 - Specific treatment (see supplemental first aid instruction on this label).

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Name	: Basil Oil (Estragole)
CAS-No.	: 84775-71-3
EC-No.	: 283-900-8

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Basil oil, chemotype estragole	(CAS-No.) 84775-71-3 (EC-No.) 283-900-8	100	
Estragole	(CAS-No.) 140-67-0 (EC-No.) 205-427-8	≥ 80	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Muta. 2, H341 Carc. 2, H351 Aquatic Chronic 3, H412
Eucalyptol	(CAS-No.) 470-82-6 (EC-No.) 207-431-5	≥ 1 – < 2.5	Flam. Liq. 3, H226 Skin Sens. 1B, H317
Linalool	(CAS-No.) 78-70-6 (EC-No.) 201-134-4 (EC Index-No.) 603-235-00-2	≥ 1 – < 2.5	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317
Eugenol	(CAS-No.) 97-53-0 (EC-No.) 202-589-1	≥ 0.1 – < 1	Eye Irrit. 2, H319 Skin Sens. 1B, H317
l-Carvone	(CAS-No.) 6485-40-1 (EC-No.) 229-352-5 (EC Index-No.) 606-148-00-8	≥ 0.1 – < 1	Skin Sens. 1B, H317
l-beta.-Bisabolene	(CAS-No.) 495-61-4	≥ 0.1 – < 1	Skin Irrit. 2, H315 Skin Sens. 1B, H317 Asp. Tox. 1, H304
Eugenyl methyl ether	(CAS-No.) 93-15-2 (EC-No.) 202-223-0	≥ 0.1 – < 1	Acute Tox. 4 (Oral), H302 Muta. 2, H341 Carc. 2, H351

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cis-beta-Ocimene	(CAS-No.) 3338-55-4 (EC-No.) 222-081-3	≥ 0.1 – < 1	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 2, H411
d-Limonene	(CAS-No.) 5989-27-5 (EC-No.) 227-813-5 (EC Index-No.) 601-029-00-7	≥ 0.1 – < 1	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
alpha-Pinene	(CAS-No.) 80-56-8 (EC-No.) 201-291-9	≥ 0.1 – < 1	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
beta-Caryophyllene	(CAS-No.) 87-44-5 (EC-No.) 201-746-1	≥ 0.1 – < 1	Skin Sens. 1B, H317 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
beta-Pinene	(CAS-No.) 127-91-3 (EC-No.) 204-872-5	≥ 0.1 – < 1	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Menthone	(CAS-No.) 10458-14-7 (EC-No.) 233-944-9	≥ 0.1 – < 1	Skin Irrit. 2, H315 Skin Sens. 1B, H317
Myrcene	(CAS-No.) 123-35-3 (EC-No.) 204-622-5	≥ 0.1 – < 1	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 2, H411
trans-Anethole	(CAS-No.) 4180-23-8 (EC-No.) 224-052-0	≥ 0.1 – < 1	Skin Sens. 1B, H317

Full text of H-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: IF exposed or concerned: Get medical advice/attention. Call a poison center or a doctor if you feel unwell.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. If the victim is unconscious : Place the affected person in the recovery position. Allow affected person to breathe fresh air. If experiencing respiratory symptoms: Call a poison center or a doctor.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention. Wash off with soap and plenty of water. Rinse skin with water/shower.
First-aid measures after eye contact	: In case of contact, immediately rinse eyes with plenty of water for at least 15 minutes.
First-aid measures after ingestion	: Rinse mouth. Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after skin contact : May cause an allergic skin reaction.

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 : Dry powder. Carbon dioxide. For large fire: Water spray. Foam.
Unsuitable extinguishing media : Strong water jet.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released. fume.

5.3. Advice for firefighters

Firefighting instructions : Move containers away from the fire area if this can be done without risk. Keep upwind. Use water spray or fog for cooling exposed containers.
Protection during firefighting : Wear fire/flare resistant/retardant clothing. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. Evacuate unnecessary personnel.
Other information : Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures : Evacuate area.

6.2. Environmental precautions

Avoid release to the environment. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters. Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Ensure adequate ventilation.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". Concerning disposal elimination after cleaning, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray. Prevent aerosol formation or splashes.

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Hygiene measures : Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store locked up. Store in a well-ventilated place. Keep cool. Keep only in original container. Keep container tightly closed.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Personal protective equipment:

Gloves. Protective goggles.

Hand protection:

Chemically resistant protective gloves. Consult supplier for specific recommendations. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer. Breakthrough time : refer to the recommendations of the supplier

Eye protection:

tightly fitting safety goggles

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection.

Personal protective equipment symbol(s):



Environmental exposure controls:

Avoid release to the environment.

Consumer exposure controls:

Do not eat, drink or smoke during use. Take off immediately all contaminated clothing. Always wash hands after handling the product. Avoid contact with skin and eyes.

Other information:

Keep away from food, drink and animal feedingstuffs.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: No data available
Odour	: No data available
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 80 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: insoluble in water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Harmful if swallowed.
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

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Basil oil, chemotype estragole (84775-71-3)

LD50 oral	1340 mg/kg bodyweight
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Estragole (140-67-0)

LD50 oral	1230 mg/kg bodyweight
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ATE CLP (oral)	1230 mg/kg bodyweight
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Eucalyptol (470-82-6)

LD50 oral	2480 mg/kg bodyweight
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ATE CLP (oral)	2480 mg/kg bodyweight
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Linalool (78-70-6)

LD50 oral	2790 mg/kg bodyweight
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ATE CLP (oral)	2790 mg/kg bodyweight
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Eugenol (97-53-0)

LD50 oral	2500 mg/kg bodyweight
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ATE CLP (oral)	2500 mg/kg bodyweight
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l-Carvone (6485-40-1)

LD50 dermal	3800 mg/kg bodyweight
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ATE CLP (dermal)	3800 mg/kg bodyweight
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Eugenyl methyl ether (93-15-2)

LD50 oral	1180 mg/kg bodyweight
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ATE CLP (oral)	1180 mg/kg bodyweight
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cis-beta-Ocimene (3338-55-4)

LD50 oral	5000 mg/kg bodyweight
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ATE CLP (oral)	5000 mg/kg bodyweight
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alpha-Pinene (80-56-8)

LD50 oral	500 mg/kg bodyweight
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ATE CLP (oral)	500 mg/kg bodyweight
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Menthone (10458-14-7)

LD50 oral	2500 mg/kg bodyweight
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ATE CLP (oral)	2500 mg/kg bodyweight
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trans-Anethole (4180-23-8)

LD50 oral	3000 mg/kg bodyweight
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ATE CLP (oral)	3000 mg/kg bodyweight
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Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Not classified

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Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Suspected of causing genetic defects.
Carcinogenicity	: Suspected of causing cancer.
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: Harmful to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Harmful to aquatic life with long lasting effects.
Not rapidly degradable	
Additional information	: Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Avoid release to the environment.

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste)	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Prevent entry to sewers and public waters.
Product/Packaging disposal recommendations	: Do not dispose of with domestic waste.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

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14.2. UN proper shipping name

Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
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14.3. Transport hazard class(es)

Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
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14.4. Packing group

Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
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14.5. Environmental hazards

Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
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No supplementary information available

14.6. Special precautions for user

Overland transport

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

Inland waterway transport

Not applicable

Rail transport

Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

Basil oil, chemotype estragole is not on the REACH Candidate List

Basil oil, chemotype estragole is not on the REACH Annex XIV List

Basil oil, chemotype estragole is not subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Basil oil, chemotype estragole is not subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor

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CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
TLM	Median Tolerance Limit
vPvB	Very Persistent and Very Bioaccumulative

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006. Supplier's safety documents. ECHA (European Chemicals Agency).

Training advice : Normal use of this product shall imply use in accordance with the instructions on the packaging.

Full text of H- and EUH-statements:	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Aquatic Chronic 4	Hazardous to the aquatic environment — Chronic Hazard, Category 4
Asp. Tox. 1	Aspiration hazard, Category 1
Carc. 2	Carcinogenicity, Category 2
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Muta. 2	Germ cell mutagenicity, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1

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Skin Sens. 1B	Skin sensitisation, category 1B
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
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.
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.
H413	May cause long lasting harmful effects to aquatic life.

SDS EU (REACH Annex II)

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