

Material safety data sheet

According to EU Regulation 1907/2006 in the current version

PURE CLOVE LEAF ESSENTIAL OIL

1. Identification of the substance/mixture and company

Trade name: Pure Clove Leaf essential oil

Natural product obtained by steam distillation of the leaves of Eugenia caryophyllata.

I.N.C.I. Eugenia Caryophyllus leaf oil

CAS No.: 84961-50-2

EINESCS No. : 904-912-8 (284-638-7) REACH pre-registration No. : 01-2119970580-36

Utilization: Raw material for cosmetic or professional use

Supplier company identification: Elemental SRL, Piața Cazărmii no.15, 410188-Oradea, jud.Bihor, Romania

Tel/Fax: +40259-436.755, www.elemental.eu

Emergency: RO: număr național pentru cazuri de urgență: 021 3183606 Institutul de

Sănătate Publică București.

International emergency number: +49 180 2273-112

2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to EC Reg. 1272/2008 (Norm. GHS-CLP)

Acute toxicity (oral), Category 4
Acute toxicity (dermal), Category 4
Skin corrosion/irritation, Category 2
Serious eye damage/eye irritation, Category 2

Skin sensitization, category 1B Aspiration hazard, Category 1

The full text of the risk phrases and precautionary phrases cited below is shown in point 16 of this sheet.

Hazards: H302 - H312 - H315 - H319 - H317 - H304

Precautions: P280 - P301+P310+P331 - P312 - P321 - P333+P313 - P337+P313 - P362+P364

Special instructions: none

Adverse physicochemical, human health and environmental effects

- Harmful in contact with skin.
- Harmful if swallowed.
- May cause an allergic skin reaction.
- Causes serious eye irritation.
- May be fatal if swallowed and enters airways.

2.2 Label elements

Hazard pictograms:





Hazard statement:



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H302+H312 – Harmful if swallowed or in contact with skin.

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.

Precautionary statement:

P280 – Wear protective gloves/protective clothing/eye protection/face protection.

P301+P310+P331 – IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting.

P312 - Call a POISON CENTRE or doctor if you feel unwell.

P321 – Specific treatment (see supplemental first aid instruction on this label).

P333+P313 – If skin irritation or rash occurs: Get medical advice/attention.

P337+P313 – If eye irritation persists: Get medical advice/attention.

P362+P364 – Take off contaminated clothing and wash it before reuse.

Special instructions: none

2.3 Other hazards

No additional information available.

3. Declaration of ingredients

The product contains the following ingredients:

Substance	C.A.S.	EINECS	Hazard symbols	Percent %
Clove leaf essential oil	84961-50-2	904-912-8	H302+H312, H304, H315,	100%
		(284-638-7)	H317, H319	

4. First aid measures

4.1 Description of first aid measures

In case of contact with skin: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.

In case of 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.

In case of inhalation: Remove person to fresh air and keep comfortable for breathing.

In case of ingestion: Rinse mouth. Do not induce vomiting. Call a doctor immediately.

4.2 Main symptoms and effects, both acute and delayed

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

Symptoms/effects after eye contact: Eye irritation. Symptoms/effects after ingestion: Risk of lung oedema.



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4.3 Indication to consult a physician immediately or any special treatments Treat symptomatically.

5. Fire fighting measures

5.1 Means of extinction

Suitable extinguishing media: Dry powder, foam, carbon dioxide. Unsuitable extinguishing media: Do not use water jet.

5.2 Special hazards arising from the substance or mixture

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

5.3 Recommendations for fire-fighters

Protection during firefighting: Do not attempt to take action without suitable protective equipment: self-contained breathing apparatus, complete protective clothing.

6. Accidental release measures

6.1 Personal precautions, protective devices and emergency procedures

For non-emergency personnel

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

For emergency responders

- Protective equipment: Do not attempt to take action without suitable protective equipment. For further information refer to section 8.
- 6.2 Environmental precautions

Avoid release to the environment.

6.3 Methods and materials for containment and remediation

Methods for cleaning up: Take up liquid spill into absorbent material. Other information: Dispose of materials or solid residues at an authorized site.

6.4 Reference to other sections

For further information refer to section 13.

7. Handling and storage

7.1 Precautions for safe handling

Ensure good ventilation of the work station. Do not get in eyes, on skin, or on clothing.



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Wear personal protective equipment. Avoid breathing dust/fume/gas/mist/vapors/spray.

Hygiene measures: Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. 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

Store locked up. Store in a well-ventilated place. Keep cool.

7.3 Specific end uses

No additional information available.

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.

Hand protection: Wear protective gloves.

Skin protection: Wear suitable protective clothing.

Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment.

Eye protection: Wear safety glasses.

Environmental exposure controls: Avoid release to the environment.

9. Physical and chemical properties

9.1 Information on physical and chemical properties

Physical state: liquid

Appearance: liquid at room temperature, more or less viscous

Color: yellow, brown

Odor: phenolic, spicy, pungent Odor 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: 100 °C



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Auto-ignition temperature: No data available Decomposition temperature: No data available Flammability (solid, gas): Not applicable Vapor pressure: No data available

Relative vapor density at 20 °C: No data available

Relative density: 1.027 - 1.046
Solubility: No data available
Log Pow: No data available
Viscosity, kinematic: < 20 mm²/s
Viscosity, dynamic: No data available
Explosive properties: No data available
Oxidizing properties: No data available
Explosive limits: No data available

9.2 Other information

Refractive index: 1.528 - 1.535

10. Stability and reactivity

10.1 Responsiveness

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 dangerous 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.

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity (oral): Harmful if swallowed.

Acute toxicity (dermal): Harmful in contact with skin.

Acute toxicity (inhalation): Not classified

Clove leaf essential oil LD50 oral rat ≈ 1370 mg/kg LD50 dermal rabbit ≈ 1200 mg/kg



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Skin corrosion/irritation: Causes skin irritation.

Serious eye damage/irritation: Causes serious eye irritation.

Respiratory or skin sensitization: May cause an allergic skin reaction.

Germ cell mutagenicity: Not classified

Carcinogenicity: Not classified Reproductive toxicity: Not classified STOT-single exposure: Not classified STOT-repeated exposure: Not classified

Aspiration hazard: May be fatal if swallowed and enters airways.

Viscosity, kinematic: < 20 mm²/s

12. Ecological information

12.1 Toxicity

Ecology - general: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects

in the environment.

Acute aquatic toxicity: Not classified Chronic aquatic toxicity: Not classified

12.2 Persistence and degradability

No additional information available.

12.3 Bioaccumulation potential

No additional information available.

12.4 Ground mobility

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.

13. Disposal considerations

13.1 Waste treatment methods

Dispose of contents/container in accordance with licensed collector's sorting instructions.

14. Transport information

14.1 UN number ADR: Not regulated IMDG: Not regulated IATA: Not regulated

Customs Code: 3301291100



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14.2 UN shipping name ADR: Not regulated IMDG: Not regulated IATA: Not regulated

14.3 Class of danger for transport

ADR: Not regulated IMDG: Not regulated IATA: Not regulated

14.4 Packing group ADR: Not regulated IMDG: Not regulated IATA: Not regulated

14.5 Environmental hazards

Not regulated

14.6 Special precautions for users Not regulated

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code Not applicable

15. Regulatory information

15.1 Regulations and legislation on health, safety and environment specific to the substance or mixture

Clove Leaf essential oil is not subject to Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC.

15.2 Chemical safety assessment.

No additional information available.

16. Additional information

16.1 Abbreviations:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CLP: Classification, Labeling, Packaging.

DNEL: Derived No Effect Level.

EINECS: European Inventory of Existing Commercial Chemical Substances. GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO: International Civil Aviation Organization.



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ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).

IMDG: International Maritime Code for Dangerous Goods. INCI: International Nomenclature of Cosmetic Ingredients.

LTE: Long-term exposure.

PNEC: Predicted No Effect Concentration.

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.

STE: Short-term exposure.
STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.

16.2 Full text of the H phrases mentioned in point 3:

H302 - Harmful if swallowed.

H304 - May be fatal if swallowed and enters airways.

H312 - Harmful in contact with skin.

H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction.

H319 - Causes serious eye irritation.

DECLARATION OF ALLERGENS

7th Amendment to Directive 76/768/EC, annex III, part I (2003/15/EC)

I.N.C.I.	C.A.S.	%
Alpha-Hexyl cinnamic aldehyde (HCA)	101-86-0	-
Amyl cinnamic alcohol	101-85-9	-
Amyl cinnamic aldehyde (ACA)	122-40-7	-
Anisyl alcohol	105-13-5	-
Benzyl salicylate	118-58-1	-
Benzyl benzoate	120-51-4	≤ 0.1000
Benzyl cinnamate	103-41-3	-
Benzyl alcohol	100-51-6	≤ 0.0100
Cinnamic alcohol	104-54-1	-
Cinnamic aldehyde	104-55-2	-
Citral	5392-40-5	-
Citronellol	106-22-9	-
Coumarin (2p-1-benzopyran-2-one)	91-64-5	-
d-Limonene	5989-27-5	≤ 0.0100
Eugenol	97-53-0	≤ 92.0000
Farnesol	4602-84-0	≤ 0.0100
Geraniol	106-24-1	-



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Lyral (Hydroxymethylpentyl cyclohexene carbaldoxaldehyde)	31906-04-4	-
Hydroxycitronellal	107-75-5	-
Isoeugenol	97-54-1	≤ 0.5000
alpha-Iso-methyl ionone	127-51-5	-
Linalool	78-70-6	≤ 0.1000
Methyl heptine carbonate	12/06/11	-
Oakmoss absolute	9000-50-4	-
p-tert-Butyl-alpha- methylhydrocinnamic aldehyde	80-54-6	-
Tree moss	68648-41-9	-

Disclaimer:

This material safety data sheet does not constitute a guarantee of the properties of the product and is not a contractual legal report. The information is given in good faith on the basis of our best knowledge of the product at the indicated time. However, we cannot accept responsibility or liability for any consequences arising from its use, no warranty for correctness and completeness is given. We caution the users against the incurred possible risks when the product is used at other ends than the use for which it was initially planned. It is the user's responsibility during handling, storage and product use to consult the main regulatory texts in force regarding workers and environment protection.