

## Material Safety Data Sheet

According to EU Regulation 1907/2006 in the current version

### CARDAMOM ESSENTIAL OIL

#### 1. Identification of the substance/mixture and company

Trade name: Cardamom Essential Oil  
I.N.C.I.: Elettaria Cardamomum Seed Oil  
CAS No. : 85940-32-5  
REACH pre-registration No. : Exempt  
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.ellemental.com](http://www.ellemental.com)  
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 regulation Règlement (CE) n° 1 272/2008

Flam. Liq. 3 (FL 3) H226 Flammable liquid and vapour.

Skin Irrit.2 (SCI 2) H315 Causes skin irritation

Asp. Tox. 1 (AT 1) H304 May be fatal if swallowed and enters airways

Skin Sens. 1 (SS 1) H317 May cause an allergic skin reaction.

Aquatic Chronic 2 (EH C2) H411 Toxic to aquatic life with long lasting effects

Classification System CLP: In accordance with Regulation (EC) No 1272/2008 and its Annexes and that the IOFI IFRA Labeling Manual in its current version.

Classification System DSD: In accordance with Council Directives 67/548/EEC, 1999/45/EC and its annexes as well as the IOFI IFRA Labeling Manual in its current version.

Other Hazards: Refer to the recommendations regarding the storage

##### 2.2 Label elements

Hazard pictograms:



Hazard statement:

H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction

H319 - Causes serious eye irritation.

H226 – Flammable liquid and vapor

H411 – Harmful to aquatic life with long lasting effects

Precautionary statement:

P260 – Do not breathe dust/fume/gas/mist/vapors/spray.

P262: Do not get in eyes, on skin, or on clothing.

P273 – Avoid release to the environment.

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

P302 + P352 – IF ON SKIN: Wash with plenty of soap and water.

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P305 + P351+P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P501 - Dispose of contents/ container in accordance with local/ regional/ national/ international regulation

#### 2.3 Other hazards

No further information available

### 3. Declaration of ingredients

Citral N°CAS : 5392-40-5 N°CE : 226-394-6 <= 0.6%

Xi R38-43

SGH07 H227-303-313-315-317-319-401 ATO 5(4950); ATD 5(2250); SCI 2; SS 1; EH A2;

EDI 2A; FL 4

alpha-Terpineol N°CAS : 98-55-5 N°CE : 202-680-6 <= 2.5%

Xi R36/38

SGH07 H227-303-315-319-401 ATO5(4300), SCI2, EDI2A, FL 4, EH A2

Limonene N°CAS : 138-86-3 N°CE : 205-341-0 <= 3.0%

Xi,N R10-38-43-50/53

SGH07, SGH08, SGH09,

SGH02

H304, 315, 317, 410, 226 AH 1, SCI 2, SS 1B, EH A1,C1, FL 3

Linalool N°CAS : 78-70-6 N°CE : 201-134-4 <= 6.0%

Xi R38

SGH07 H227-303-315-319-402 ATO 5 (2780), SCI 2, EH A3, EDI 2A, FL 4

alpha-Pinene N°CAS : 80-56-8 N°CE : 201-291-9 <= 2.0%

Xn R(10)-38-43-65

SGH02, SGH07, SGH08 H226-303-304-315-317 FL 3, ATO 5(3700), SCI 2, SS 1B, AH 1

beta-Pinene N°CAS : 127-91-3 N°CE : 204-872-5 <= 1.0%

Xn R(10)-38-43-65

SGH02, SGH07, SGH08 H226-304-315-317 FL 3, SCI 2, SS 1B, AH 1

Farnesol N°CAS : 4602-84-0 N°CE : 225-004-1 <= 0.2%

Xi R36/38-43

SGH08 H315, 319, 317 SCI 2; EDI 2A, SS 1

Geraniol N°CAS : 106-24-1 N°CE : 203-377-1 <= 1.5%

Xi R38-41-43

SGH05, SGH07 H303-315-317-318-401 ATO 5(4200); SCI 2; EDI 1; SS 1; EH A2

Nerolidol N°CAS : 7212-44-4 N°CE : 230-597-5 <= 1.0%

N R50/53

SGH09 H316, 410 ATO, ATD NC; ATI ND; SCI 3; EH A1,C1

Linalyl acetate N°CAS : 115-95-7 N°CE : 204-116-4 <= 6.0%

Xi R38

SGH07 H227-315-319-402 FL 4, EDI 2A, SCI 2, EH A3

Terpinyl acetate N°CAS : 8007-35-0 N°CE : 232-357-5 <= 45.0%

N R51/53

SGH09 H316, 411 SCI 3, EH A2,C2

### 4. First aid measures

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#### 4.1 Description of first aid measures

In case of contact with skin: wash the affected area immediately with plenty of soap and water, if irritation persists seek medical attention.

In case of contact with eyes: rinse with plenty of water for at least 15 minutes (while holding eyelids apart), if irritation persists seek medical attention.

In case of inhalation: take the person to fresh air, remove contaminated clothes, if difficulty of breathing persists seek medical attention.

#### 4.2 Main symptoms and effects, both acute and delayed

In case of contact with skin, may cause irritation. May cause illness in case of inhalation.

Generally, if in doubt or if symptoms persist, consult a doctor. Never give anything by mouth to an unconscious person. It is recommended that those who provide first aid have a personal protective equipment. No action shall be taken involving any personal risk or without suitable training.

#### 4.3 Indication to consult a physician immediately or any special treatments

In case of illness contact your physician immediately. No special treatment. Treat symptomatically. Contact a specialist for treatment of poisoning if large amounts are ingested or inhaled.

### 5. Fire fighting measures

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#### 5.1 Means of extinction

Do not use water to extinguish fire. Use foam fire extinguishers, with carbon dioxide or powder.

#### 5.2 Special hazards arising from the substance or mixture

During the fire toxic fumes could be released, use protective masks. Overpressure can be created in containers exposed to fire with danger of explosion, cool the containers before handling them.

#### 5.3 Recommendations for fire-fighters

Always wear full fire protection equipment (protective helmet with visor, fireproof clothing, intervention gloves, breathing apparatus).

### 6. Accidental release measures

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#### 6.1 Personal precautions, protective devices and emergency procedures

In case of loss or spillage of the product, remove any flames or other sources of heat from the area where the leak occurred. Use protection if necessary for airways; protective clothing must be worn (eg. safety glasses or masks). Do not handle damaged containers or spilled product without wearing the appropriate protective equipment.

#### 6.2 Environmental precautions

Prevent the product from entering drains, superficial drains, groundwater and confined areas. In case of such contamination inform the competent authorities.

#### 6.3 Methods and materials for containment and remediation

Absorb spilled product with inert absorbent material (sand, vermiculite, diatomaceous earth). Collect most of the resulting material and deposit it in containers for disposal. Ensure adequate ventilation of the site.

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#### 6.4 Reference to other sections

Disposal of the contaminated material must be carried out in accordance with the provisions of point 13.

## 7. Handling and storage

### 7.1 Precautions for safe handling

Use in well-ventilated places. Do not eat, drink or smoke during use product handling. Always wash your hands before and after use. Use protective clothing. Avoid contact, do not inhale the vapors, do not swallow, working under a hood or suction arm. Prevent access to persons not required and not wearing protective clothing. Check for an adequate ventilation. Wear appropriate respiratory protection such as the ventilation is inadequate.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in well-filled, tightly closed containers, away from direct sunlight, away from any source of combustion. Do not smoke. Store in original container or other container approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain residue product.

### 7.3 Specific end uses

None. Comply with regulations and specifications of the product. No specific recommendations. Apply the rules of handling above.

## 8. Exposure controls / personal protection

### 8.1 Control parameters

Unregulated. No specific exposure limits for this product.

### 8.2 Exposure controls



Hand protection: Protect hands with category I work gloves (ref. Directive 89/686 / EEC and standard EN 374) such as latex, PVC or equivalent.

Skin protection: Wear work clothes with long sleeves and safety footwear for professional use of category I (ref. Directive 89/686 / EEC and standard EN 344). Wash with soap and water after removing protective clothing.

Respiratory protection: Use protective masks. The use of respiratory protection is necessary in the absence of technical measures to limit worker exposure.

Eye protection: it is recommended to wear airtight protective goggles (ref. Standard EN 166).

## 9. Physical and chemical properties

### 9.1 Information on physical and chemical properties

Appearance: Liquid at room temperature

Color: Nearly colourless to pale yellow

Odor: characteristic

Relative density (d 20 / 20): 0.920 to 0.940

Refractive index at 20°C: 1.460 to 1.467

Optical rotation (°): +24° to +39°

Flash point: +59 °C

Odor threshold: NA

pH: NA

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Melting point / freezing point: NA  
Initial boiling point and boiling range: NA  
Flash point: NA  
Evaporation rate: NA  
Flammability (solid, gas): NA  
Upper / lower flammability or explosive limits: NA  
Vapor tension: NA  
Vapor density: NA  
Solubility in water: NA  
Partition coefficient: n-octanol / water NA  
Auto-ignition temperature: NA  
Decomposition temperature: NA  
Viscosity: NA  
Explosive properties: NA  
Oxidizing properties: NA

#### 9.2 Other information

None

### 10. Stability and reactivity

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#### 10.1 Reactivity

This product is stable to shock, vibration and pressure under normal conditions of use. In the presence of light and heat, oxidation can occur.

#### 10.2 Chemical stability

No significant changes in the composition in time respecting the storage conditions

#### 10.3 Possibility of dangerous reactions

According to our knowledge none in normal use.

#### 10.4 Conditions to avoid

Do not heat to high temperature. Do not expose sealed containers in the sun. Keep away from sources of ignition.

#### 10.5 Incompatible materials

No information available

#### 10.6 Hazardous decomposition products

No decomposition if used as directed.

### 11. Toxicological information

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#### 11.1 Information on toxicological effects

Hazards assessed by the methods described in the Regulation (EC) No 1272/2008 and its Annexes for the case of complex natural substances and / or mixtures.

Acute toxicity information:

Harmful effect by swallowed DL org. 50  $\geq 5\,000$  mg/kg Oral ingestion on rat

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Harmful effect by skin contact DL derm.50  $\geq 5\,000$  mg/kg Topic dermal application on rabbit  
Skin corrosion / irritation Can cause a skin irritation  
Serious eye damage / eye irritation Can cause a serious eyes irritaztion  
Respiratory or skin sensitization May cause an allergic skin reaction  
Germ cell mutagenicity No significant effects or critical hazards  
Carcinogenicity No significant effects or critical hazards.  
Reproductive toxicity No significant effects or critical hazards  
Aspiration hazard May be fatal if inhaled and enters airways  
Endocrine disrupting properties No specific data

## 12. Ecological information

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### 12.1 Toxicity

Do not allow the product, even if diluted or in small quantities, to penetrate the ground aquifers or drain pipes. Toxic to aquatic life with long lasting effects

### 12.2 Persistence and degradability

No data available

### 12.3 Bioaccumulation potential

No data available

### 12.4 Ground mobility

No data available

### 12.5 Results of PBT and vPvB assessment

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

### 12.6 Other adverse effects

No data available

## 13. Disposal considerations

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### 13.1 Waste treatment methods

Product residues are to be considered special hazardous waste. The danger of the waste that partly contains this product must be assessed on the basis of current legislative provisions.

Disposal must be entrusted to an authorized waste management company in compliance with national and possibly local legislation.

Contaminated packaging must be sent for recovery or disposal in compliance with national waste management regulations.

## 14. Transport information

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### 14.1 UN number

ADR/ IMDG/ IATA : UN1993

### 14.2 UN shipping name

Flammable liquid, n.o.s. (Cardamom oil)

### 14.3 Class of danger for transport

ADR/ IMDG/ IATA : 3

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Tunnel restriction code Further information : (D/E)

#### 14.4 Packing group

ADR/ IMDG/ IATA : III

#### 14.5 Environmental hazards

Marine pollutant : YES

#### 14.6 Special precautions for users

No additional data available

#### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code

Not applicable

### 15. Regulatory information

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

The regulatory information given above only indicates the principal regulations specifically applicable to the product.

#### 15.2 Chemical safety assessment.

According to our knowledge, no assessment has been conducted on the product.

### 16. Additional information

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#### 16.1 Abbreviations:

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Test-ing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regula-tion (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergen-cy Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration as-sociated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good La-boratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships car-rying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - Interna-tional Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO – International Maritime Organization; INCI: International Nomenclature of Cosmetic Ingredients; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test popula-tion; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - Interna-tional Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Ef-fect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic sub-stance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quanti-tative) Structure Activity Relationship; PNEC: Predicted No Effect Concentration; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Re-striction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous

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Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; STE: Short-term exposure; STEL: Short Term Exposure limit; STOT: Specific Target Organ Toxicity; TCSI - Taiwan Chemical Substance Inventory; TECL - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

#### DECLARATION OF ALLERGENS

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

I.N.C.I.	C.A.S.	Max %
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	-
Benzyl cinnamate	103-41-3	-
Benzyl alcohol	100-51-6	-
Cinnamic alcohol	104-54-1	-
Cinnamic aldehyde	104-55-2	-
Citral	5392-40-5	0,6000
Citronellol	106-22-9	-
Coumarin (2p-1-benzopyran-2-one)	91-64-5	-
d-Limonene	5989-27-5	3,0000
Eugenol	97-53-0	-
Farnesol	4602-84-0	0,2000
Geraniol	106-24-1	1,5000
Lylal (Hydroxymethylpentyl cyclohexene carbaldoxaldehyde)	31906-04-4	-
Hydroxycitronellal	107-75-5	-
Isoeugenol	97-54-1	-
alpha-Iso-methyl ionone	127-51-5	-
Linalool	78-70-6	6,0000
Methyl heptine carbonate	12/06/11	-
Oakmoss absolute	9000-50-4	-



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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.