



**Material safety data sheet**  
According to EU Regulation 1907/2006 in the current version  
**PURE GINGER ESSENTIAL OIL**

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

Trade name:	Pure Ginger essential oil Natural product obtained by steam distillation of the root.
I.N.C.I.	Zingiber Officinale root oil
CAS No. :	84696-15-1
EINESCS No. :	283-634-2
REACH pre-registration No. :	/
Utilization:	Raw material for cosmetic or professional use
Supplier company identification:	<b>Elemental SRL</b> , 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)  
Skin corrosion/irritation, Category 2  
Serious eye damage/eye irritation, Category 2  
Skin sensitization, Category 1  
Aspiration hazard, Category 1  
Hazardous to the aquatic environment — Chronic Hazard, Category 2

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

Hazards: H304 – H315 – H317 – H319 – H411  
Precautions: P261 – P264 – P280 – P301+P310+P331 – P333+P313 – P337+P313 – P362+P364 – P391  
Special instructions: none

Adverse physicochemical, human health and environmental effects

- Causes skin irritation.
- May cause an allergic skin reaction.
- May be fatal if swallowed and enters airways.
- Toxic to aquatic life with long lasting effects.

#### 2.2 Label elements

Hazard pictograms:



Hazard statement:

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.



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H411 – Toxic to aquatic life with long lasting effects.

Precautionary statement:

P261 – Avoid breathing dust/fume/gas/mist/vapors/spray.

P264 – Wash hands, forearms and face thoroughly after handling.

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

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

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.

P391 – Collect spillage.

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 %
beta-Bisabolene	495-61-4	-	H315, H317, H304	≤ 13%
Camphene	79-92-5	201-234-8	H228, H319, H400, H410	≤ 10%
(E,E)-alpha-Farnesene	502-61-4	207-948-6	-	≤ 9%
1,8-Cineol	470-82-6	207-431-5	H226, H317	≤ 8%
alpha-Pinene	80-56-8	201-291-9	H226, H302, H315, H317, H304, H400, H410	≤ 4%
Myrcene	123-35-3	204-622-5	H226, H315, H319, H304, H400, H411	≤ 2%
d- limonene	138-86-3	205-341-0	H226, H315, H317, H304, H400, H410	≤ 2%
Geraniol	106-24-1	203-377-1	H317, H315, H318	≤ 1%
Bornéol	507-70-0	208-080-0	H228, H315, H411	≤ 1%
beta-Pinene	127-91-3	204-872-5	H226, H315, H317, H304, H400, H410	≤ 0.8%
Geranial	141-27-5	205-476-5	H315, H319, H317	≤ 0.6%
Neral	106-26-3	203-379-2	H315, H319, H317	≤ 0.6%
trans-Nerolidol	40716-66-3	-	H319, H317, H400, H410	≤ 0.5%
alpha phellandrene	99-83-2	202-792-5	H226, H304	≤ 0.5%
alpha-Terpineol	98-55-5	202-680-6	H315, H319	≤ 0.5%
2-Undecanone	112-12-9	203-937-5	H412, H400	≤ 0.3%



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Terpinolene	586-62-9	209-578-0	H317, H304, H400, H410	≤ 0.3%
1,7,7-Trimethylbicyclo[2.2.1]heptan-2-one	76-22-2	200-945-0	H371, H315, H228, H318, H411, H302, H332	≤ 0.2%
toluene	108-88-3	203-625-9	H225, H315, H361d, H336, H373, H304	≤ 0.1%
beta-Caryophyllene	87-44-5	201-746-1	H317, H304, H413	≤ 0.1%
delta-3-Carene	13466-78-9	236-719-3	H317, H315, H226, H304, H410, H400, H332	≤ 0.1%
p-Cymene	99-87-6	202-796-7	H361, H226, H304, H411	≤ 0.1%
gamma-Terpinene	99-85-4	202-794-6	H361, H226, H304	≤ 0.5%

#### 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 eyes with water as a precaution.

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

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

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

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

Symptoms/effects after ingestion: Risk of lung oedema.

##### 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



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- Emergency procedures: Ventilate spillage area. Avoid contact with skin and eyes. 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

For containment: Collect spillage.

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. Avoid contact with skin and eyes. 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

Storage conditions: 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.



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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

Color: pale yellow, amber

Odor: spicy, resinous, citral-like, earthy, woody

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: 63 °C

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: 0.872 - 0.884

Solubility: No data available

Log Pow: No data available

Viscosity, kinematic: < 20 mm<sup>2</sup>/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: 1.482 - 1.495

## 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



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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): Not classified

Acute toxicity (dermal): Not classified

Acute toxicity (inhalation): Not classified

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LD50 oral rat > 5000 mg/kg

LD50 dermal rabbit > 5000 mg/kg

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 mm<sup>2</sup>/s

## 12. Ecological information

### 12.1 Toxicity

Ecology - general: Toxic to aquatic life with long lasting effects.

Acute aquatic toxicity: Not classified

Chronic aquatic toxicity: Toxic to aquatic life with long lasting effects.

### 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



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

**14. Transport information**

ADR / RID		IMDG		IATA	
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14.1 UN number

ADR: 3082  
IMDG: 3082  
IATA: 3082  
Customs Code: 3301294100

14.2 UN shipping name

ADR: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (alpha-Pinene)  
IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (alpha-Pinene)  
IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (alpha-Pinene)

14.3 Class of danger for transport

ADR: 9  
IMDG: 9  
IATA: 9

14.4 Packing group

ADR: III  
IMDG: III  
IATA: III

14.5 Environmental hazards

ADR:  
- Dangerous for the environment: Yes  
IMDG:  
- Dangerous for the environment: Yes  
- Marine pollutant: Yes  
IATA:  
- Dangerous for the environment: Yes

14.6 Special precautions for users

**Overland transport**

Classification code (ADR): M6  
Special provisions (ADR): 274, 335, 375, 601  
Limited quantities (ADR): 5I  
Excepted quantities (ADR): E1  
Packing instructions (ADR): P001, IBC03, LP01, R001  
Special packing provisions (ADR): PP1  
Mixed packing provisions (ADR): MP19  
Portable tank and bulk container instructions (ADR): T4



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Portable tank and bulk container special provisions (ADR): TP1, TP29

Tank code (ADR): LGBV

Vehicle for tank carriage: AT

Transport category (ADR): 3

Special provisions for carriage - Packages (ADR): V12

Special provisions for carriage - Loading, unloading and handling (ADR): CV13

Hazard identification number (Kemler No.): 90

Orange plates:



Tunnel restriction code (ADR): -

EAC code: •3Z

**Transport by sea**

Special provisions (IMDG): 274, 335, 969

Packing instructions (IMDG): P001, LP01

Special packing provisions (IMDG): PP1

IBC packing instructions (IMDG): IBC03

Tank instructions (IMDG): T4

Tank special provisions (IMDG): TP2, TP29

EmS-No. (Fire): F-A

EmS-No. (Spillage): S-F

Stowage category (IMDG): A

**Air transport**

PCA Excepted quantities (IATA): E1

PCA Limited quantities (IATA): Y964

PCA limited quantity max net quantity (IATA): 30kgG

PCA packing instructions (IATA): 964

PCA max net quantity (IATA): 450L

CAO packing instructions (IATA): 964

CAO max net quantity (IATA): 450L

Special provisions (IATA): A97, A158, A197

ERG code (IATA): 9L

**Inland waterway transport**

Classification code (ADN): M6

Special provisions (ADN): 274, 335, 375, 601

Limited quantities (ADN): 5 L

Excepted quantities (ADN): E1

Carriage permitted (ADN): T

Equipment required (ADN): PP

Number of blue cones/lights (ADN): 0

**Rail transport**

Classification code (RID): M6

Special provisions (RID): 274, 335, 375, 601

Excepted quantities (RID): E1

Packing instructions (RID): P001, IBC03, LP01, R001

Special packing provisions (RID): PP1





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Mixed packing provisions (RID): MP19  
Portable tank and bulk container instructions (RID): T4  
Portable tank and bulk container special provisions (RID): TP1, TP29  
Tank codes for RID tanks (RID): LGBV  
Transport category (RID): 3  
Special provisions for carriage – Packages (RID): W12  
Special provisions for carriage - Loading, unloading and handling (RID): CW13, CW31  
Colis express (express parcels) (RID): CE8  
Hazard identification number (RID): 90

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

### EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:	
Reference code	Applicable on
3(a)	Myrcene; beta-Pinene; dipentene, limonene; 1,8-Cineol; Camphene; alpha-Pinene; toluene; delta-3-Carene
3(b)	Pure Ginger essential oil; Geraniol; Neral; Myrcene; beta-Pinene; dipentene, limonene; Geranial; 1,8-Cineol; beta-Bisabolene; Terpinolene; Camphene; alpha-Pinene; toluene; delta-3-Carene
3(c)	Pure Ginger essential oil; 2-Undecanone; Myrcene; beta-Pinene; dipentene, limonene; Terpinolene; Camphene; alpha-Pinene; delta-3-Carene
48.	toluene

Pure Ginger essential oil is not on the REACH Candidate List.

Pure Ginger essential oil is not on the REACH Annex XIV List.

Pure Ginger essential oil 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.

Pure Ginger 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 chemical safety assessment has been carried out.

## 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.

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



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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:

H225 - Highly flammable liquid and vapor.

H226 - Flammable liquid and vapor.

H228 - Flammable solid.

H302 - Harmful if swallowed.

H304 - May be fatal if swallowed and enters airways

H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction.

H318 - Causes serious eye damage.

H319 - Causes serious eye irritation.

H332 - Harmful if inhaled.

H336 - May cause drowsiness or dizziness.

H361 - Suspected of damaging fertility or the unborn child.

H361d - Suspected of damaging the unborn child.

H371 - May cause damage to organs

H373 - May cause damage to organs through prolonged or repeated exposure.

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.

#### 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	-
Benzyl cinnamate	103-41-3	-
Benzyl alcohol	100-51-6	-
Cinnamic alcohol	104-54-1	-
Cinnamic aldehyde	104-55-2	-
Citral	5392-40-5	≤ 1.2000



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Citronellol	106-22-9	≤ 0.3000
Coumarin (2p-1-benzopyran-2-one)	91-64-5	-
d-Limonene	5989-27-5	≤ 2.0000
Eugenol	97-53-0	-
Farnesol	4602-84-0	-
Geraniol	106-24-1	≤ 1.0000
Lyral (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	≤ 0.5000
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.