



Material Safety Data Sheet

According to EU Regulation 1907/2006 in the current version

Edition 02.10.2016

Version 25.09.2017

LEMON ESSENTIAL OIL

1. Identification of the substance/preparation and the company

Trade name: Lemon essential oil, furanocoumarin-free
Essential oil extracted by mechanical proceeding without heating, of the fresh peel of the fruit of Citrus limon L. Burman f., folowed by distillation

Utilisation: Raw material for perfume, aromatherapy, cosmetics

Supplier company identification: **Elemental SRL**, Piata Cazarmii no.15, 410188-Oradea, jud.Bihor, Romania

Emergency: Tel/Fax: +40259-436.755, www.elemental.eu
RO: numar national pentru cazuri de urgenta: 021 3183606 Institutul de Sanatate Publica Bucuresti. International emergency number: +49 180 2273-112

2. Hazards Identification

2.1 Classification of the substance

Classification according to Regulation (EC) No 1272/2008

Hazard statements:

H226: Flammable liquid and vapour. 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. H410: Very toxic to aquatic life with long lasting effects.

Classification according to 67/548/EEC and 1999/45/EC

N: Dangerous for the environment. Xn: Harmful

Risk statements:

R10: Flammable. R38: Irritating to skin. R43: May cause sensitization by skin contact. R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R65: Harmful: May cause lung damage if swallowed.

Safety statements:

S24: Avoid contact with skin. S37: Wear suitable gloves. S61: Avoid release to the environment. Refer to special instructions / Safety Data Sheets. S62: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Signal word: Danger

Labelling:

GHS02: Flammable. GHS07: Acute toxicity, irritation, dermal sensitizer, narcotic effects. GHS08: Health hazards.

GHS09: Hazardous to aquatic environment.



Hazard statements:

H226: Flammable liquid and vapour. 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. H410: Very toxic to aquatic life with long lasting effects.

Precautionary statements:

P210: Keep away from heat/sparks/open flames/hot surfaces – No smoking. P273: Avoid release to the environment.

P280: Wear protective gloves/protective clothing/eye protection/face protection. P301+310: IF SWALLOWED:

Immediately call a POISON CENTER or doctor/physician. P302+352: IF ON SKIN: Wash with soap and water. P501:

Dispose of contents/container to ...

2.3 Other hazards

CMR components: none. Allergens: see section 16.

3. Composition / Information on ingredients

INCI NAME : CITRUS LIMON PEEL OIL

CAS TSCA: 8008-56-8, CAS EINECS: 84929-31-7, FEMA: 2625, EINECS: 284-515-8

Hazardous components:



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Constituent Name	Identification		Concentration %
	CAS #	EINECS #	
Alpha-Pinene	80-56-8	201-291-9	≤ 5%
Beta-Bisabolene	495-61-4	N.D.	≤ 6%
Beta-Pinene	127-91-3	204-872-5	≤ 20%
Citral (Geranial + Neral)	5392-40-5	226-394-6	≤ 5%
D-Limonene	5989-27-5	227-813-5	≤ 82%
Gamma-Terpinene	99-85-4	202-794-6	≤ 15%
Myrcene	123-35-3	204-622-5	≤ 5%
Para-Cymene	99-87-6	202-796-7	≤ 4%

Classification:

Constituent name	Labelling	Hazard statements	Signal word	Risk statements
Alpha-Pinene	GHS02, GHS07, GHS08, GHS09	H226, H303, H304, H315, H317, H400, H410	Danger	Xn, N, R10, R43, R50/53, R65
Beta-Bisabolene	GHS07, GHS08	H304, H315, H317	Danger	Xn, R38, R43, R65
Beta-Pinene	GHS02, GHS07, GHS08, GHS09	H226, H304, H315, H317, H400, H410	Danger	Xn, N, R10, R43, R50/53, R65
Citral (Geranial + Neral)	GHS07	H313, H315, H317, H319, H401	Warning	Xi, R38, R43
D-Limonene	GHS02, GHS07, GHS08, GHS09	H226, H304, H315, H317, H400, H410	Danger	Xi, N, R10, R38, R43, R50/53
Gamma-Terpinene	GHS02, GHS08	H226, H303, H304, H316	Danger	Xn, R65
Myrcene	GHS02, GHS07, GHS08	H226, H304, H315, H319	Danger	Xn, R52/53, R65
Para-Cymene	GHS02, GHS08, GHS09	H226, H303, H304, H316, H401, H411	Danger	N, Xn, R10, R51/53, R65

4. First Aid

In the event of skin contact:

Take off contaminated clothing. Wash immediately with soap and plenty of water. If irritation, get medical advice.

In the event of eye contact:

Flush immediately with plenty of flowing water for at least 10 minutes, holding eyelids apart. Consult an ophthalmologist.

In the event of ingestion:

If swallowed, rinse mouth with water. DO NOT induce vomiting. Get medical advice, showing label information. In the event of excessive inhalation: Move the victim to fresh air. Get medical advice immediately.

5. Fire-fighting Measures

5.1 Extinguishing media

Recommended : foam, dry powder, carbon dioxide (CO₂). Inadvisable : avoid full water jet.

5.2 Special hazards

In case of fire, toxic fumes like carbon monoxide and carbon dioxide may be liberated. Burning produces heavy smoke, do not inhale fumes.



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5.3 Particular protective measures

Particular protective measures when fire-fighting: The pressure in the closed containers may increase with high temperature. Cool the endangered drums by water spraying or by an appropriate produce if water is not authorized.

5.4 Advice for firefighters

Move undamaged containers from immediate hazard area if it can be done safely. Use suitable breathing apparatus. Regard to self protection.

6. Accidental release measures:

6.1 Individual precautions

Remove all sources of ignition (Avoid all flammable sources. Do not smoke.) Provide adequate ventilation. Give a warning to people in the hazardous area. Wear personal protection equipment. Avoid contact with skin, eyes, and clothing.

6.2 Precautions for environmental conservation

Stop the substance to enter into drains and groundwater. Prevent spreading over a wide area.

6.3 Cleaning methods

Limit the dispersion of the product. Absorb the liquid with an inert absorbent, such as oil or sand. Wash with a grease extractor. Get rid of the duster and sponges used, according to local regulations.

7. Handling and Storage

7.1 Handling

Handle with care. Keep the product away from heat and light. Remove all sources of ignition. Do not eat, drink, or smoke when handling the product. Do not ingest the product. Wear personal protective clothing. Use only in well-ventilated areas.

7.2 Storage

Fit quantities according to container volume, avoid too important empty spaces. It is recommended to stock the product in its original packaging, tightly closed, sheltered from heat sources, air and light. Avoid important temperature variation. Keep in temperate and well-ventilated area. Respect the usual hygiene rules.

7.3 Specific end use(s): No data available (confer to above recommendations)

8. Exposure Controls and Personal Protection

8.1 Control parameters

No data available.



8.2 Exposure controls

Use in well ventilated areas. Follow usual hygiene rules. Wash hands after handling the product. Keep away from food and beverages. Provide accessible fire-extinguisher.

Respiratory protection: Generally unnecessary in a well-ventillated area. If ventilation is insufficient, respiratory protection must be worn. For pulverulent products, the wearing of a mask is recommended.

Hand protection: The wearing of chemical solvent and acid resistant gloves is necessary. (according to EN374 regulation).

Eye protection: The wearing of adequate safety glasses is advised. Prescription glasses do not qualify as safety glasses. Contact lenses users should wear prescription and safety glasses while using the product.

Skin protection: Wear personal safety equipment. Handle the product with care, avoiding skin contact.

9. Physical and Chemical Properties

Appearance : Mobile liquid at room temperature

Colour : colourless to yellow



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Odour : Characteristic, fresh

Flash point in °C (closed cup) : +45° to +59°C

Specific gravity at 20°C : 0.835 to 0.860

Refractive index at 20°C : 1.460 to 1.487

Optical rotation at 20°C : +55° to +75°

Solubility : Soluble in ethanol. Insoluble in water.

Main components: Limonene, β -pinene, γ -terpinene

10. Stability and Reactivity

10.1 Condition to avoid

Excessive heat, open flames or other sources of ignition. This product is stable at room temperature. Temperatures above room temperature will allow the transfer from liquid to vapour phase and the formation of explosive atmosphere. Storing in open containers will benefit the formation of peroxides and derogate the quality.

10.2 Material to avoid or incompatible: strong acids, alkali or oxidizing agents

10.3 Dangerous decomposition products

No dangerous decomposition product known, if used according to specifications.

11. Toxicological Information

For dermal and eye absorption: Causes skin and serious eye irritation

For dermal and breathing sensitization: May cause a skin allergy

About mutagenicity: Not identified as mutagen

About carcinogenicity: Not identified as carcinogen

Toxic effects on the reproductive system: None

Ill effect by absorption: LD oral 50 \geq 5000 mg/kg

Ill effect by dermal contact: LD dermal 50 \geq 5000 mg/kg

12. Ecological Information

Avoid any pollution of soil, ground and surface waters.

12.1 Toxicity: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

12.2 Mobility: No data available.

12.3 Persistence et degradability: No data available.

12.4 Bio-accumulative potential: No data available.

12.5 PBT evaluation results: No data available.

12.6 Other adverse effects: No data available.

13. Disposal Considerations

Dispose of or recycle waste material in accordance with local and EC environmental regulations.

Air emission : avoid

Wastewater disposal : avoid

Release into natural environment: avoid

Waste destruction: Appropriate incineration station

Do not use the empty containers

Get rid of the duster and sponges used by incineration.

14. Transport Information



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Customs code : 33011310

Transport : UN 1169 Extracts, aromatic, liquid, 3, III

15. Additional Regulatory Information

Regulations specific for the substance or mixture: not available data

Chemical safety assessment: not available data

16. Other Information

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).

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.

DECLARATION OF ALLERGENS

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

INCI Name	CAS No	Typical Contents in %
2-(TERT-BUTYL PROPIONALDE) (Lilial)	80-54-6	0
3-METHYL-4-(2,6,6 TRIMETHYL-2-CYCLOHEXINE-1-YL)-3-BUTEN-2-ONE	127-51-5	0
AMYL CINNAMAL	122-40-7	0
AMYL CINNAMYL ALCOHOL	101-85-9	0
ANISYL ALCOHOL (Anise alcohol)	105-13-5	0
BENZYL ALCOHOL	100-51-6	0
BENZYL BENZOATE	120-51-4	0
BENZYL CINNAMATE	103-41-3	0
BENZYL SALICYLATE	118-58-1	0
CINNAMAL (Cinnamic Aldehyde)	104-55-2	0
CINNAMYL ALCOHOL	104-51-6	0
CITRAL	5392-40-5	<= 5.0000
CITRONELLOL	106-22-9	<= 0.2000
COUMARIN	91-64-5	0
LIMONENE	5989-27-5	<= 82.0000
EUGENOL	97-53-0	<= 0.1000



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FARNESOL	4602-84-0	0
GERANIOL	106-24-1	<= 0.2000
HEXYL CINNAMIC ALDEHYDE (Hexyl Cinnamal)	101-86-0	0
HYDROXYCITRONELLAL	107-75-5	0
HYDROXYMETHYL PENTYL CYCLOHEXENE CARBOXALDEHYDE (Lyral)	31906-04-4	0
ISO EUGENOL	97-54-1	0
LINALOOL	78-70-6	<= 1.0000
METHYL HEPTINE CARBONATE	111-12-6	0
OAK MOSS EXTRACT (Evernia Prunastri)	90028-68-5	0
TREE MOSS EXTRACT (Evernia Furfuracea)	90028-67-4	0

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.