



Material Safety Data Sheet

Lemon Organic

SECTION 1: Identification of the substance/mixture and of the company/undertaking					
1.1 Product Identifier					
Product Name	Lemon Oil, Organic				
Biological Definition	The volatile oil obtained by cold pressing the peels of the fruits of Citrus limon (L.) Burm. (Fam. Rutaceae)				
INCI Name	Citrus Limon Peel Oil				
Synonyms & Trade Names	Lemon Oil Expressed				
Internal Product Code	OCLEMO				
FEMA No.	2625	FDA No.	§182.20	CoE No.	139
CAS-No	8008-56-8	EC No.		EINECS No.	84929-31-7

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SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (67/548/EEC)	Xn+N; R10-38-43-51/53-65, S24-37-61-62
Classification (EU 1272/2008)	UN-GHS: FL 3, AH 1, SCI 2, SS 1, EH A2,C2 EU-CLP: FL 3, AH 1, SCI 2, SS 1, EH A2,C2

2.2 Label elements

Label in accordance with Regulation (EC) No 1272/2008

GHS Label:	   
Signal word:	Danger
Contains	Limonene, pinenes, gamma-terpinene, citral, myrcene
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 H411 Toxic to aquatic life with long-lasting effects
Precautionary Statements:	P262 Do not get in eyes, on skin or on clothing P280 Wear protective gloves/protective clothing/eye protection/face protection. P273 Avoid release to the environment P301/310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P331 Do NOT induce vomiting
Supplementary Precautionary Statements:	P391 Collect spillage

Risk phrases and Safety phrases in full refer to *Section 16 – Other Information*

2.3 Other hazards

Adverse physio-chemical properties	Combustible but will not ordinarily self-ignite.
Adverse effects on human health	Skincondition can cause sensitisation.

SECTION 3: Composition/information on ingredients

3.1 Substances

68% Limonene UN-GHS: SCI 2; SS 1; EH A1,C1
13% Pinenes UN-GHS: ATO 5(3700), SCI 2, SS 1
8.5% gamma-Terpinene UN-GHS: ATO 5(3850); SCI 3
2% Citral UN-GHS: ATO 5(4950); ATD 5(2250); SCI 2; SS 1; EH A2
1.6% Myrcene UN-GHS: EDI 2A, SCI 2
0.2% beta-Caryophyllene UN-GHS: SCI 3

3.2 Mixtures

EU INCI	US INCI
N/A	N/A

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SECTION 4: First aid measures

4.1 Description of first aid measures

General Information	See categories below
Inhalation	Remove from exposure area to fresh air. Contact a doctor if necessary.
Ingestion	Wash mouth out with water and obtain medical advice immediately.
Skin Contact	Remove contaminated clothing. Wash thoroughly with soap and water. Seek medical advice if irritation persists or there is any sign of tissue damage.
Eye Contact	Flush with plenty of water and seek medical advice if necessary.

4.2 Most important symptoms and effects, both acute and delayed

N/A

4.3 Indication of any immediate medical attention and special treatment needed

N/A

SECTION 5: Fire fighting measures

5.1 Extinguishing Media

Use CO2, Dry Powder or Foam type extinguishers, spraying extinguishing media to base of flames. Do not use direct water jet on burning material.

5.2 Special hazards arising from the substance or mixture.

None

5.3 Advice for fire-fighters

Wear protective clothing. Avoid inhalation of vapours. Closed containers may build up pressure when exposed to heat and should be cooled with water spray.

SECTION 6: Accidental release measures

6.1 Personal precautions

Maintain good occupational and personal hygiene. Avoid contact with skin and eyes.

6.2 Environmental precautions

Do not discharge directly into drains or soil. Keep away from surface and ground water.

6.3 Methods and material for containment and cleaning up

Soak up spillage with sand or other inert material. Transfer soaked material to suitable waste container and dispose according to prevailing regulations.

6.4 References to other sections.

Please refer to *Section 8 - Exposure controls/personal protection* for further information on personal precautions

Please refer to *Section 13 - Disposal Considerations* for further information on waste treatment.

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SECTION 7: Handling and Storage

7.1 Precautions for safe handling

Apply good manufacturing practice & industrial hygiene practices, ensuring proper workplace ventilation. Observe good personal hygiene, and do not eat, drink or smoke whilst handling.

7.2 Conditions for safe storage, including any incompatibilities

Store in tightly closed original container, in a cool, dry & ventilated area away from heat sources & protected from light. Keep air contact to a minimum.

7.3 Specific end use(s)



N/A

SECTION 8: Exposure controls/personal protection

8.1 Control Parameters

None

8.2 Exposure Controls

Eye protection		Use safety glasses.
Hand protection		Avoid all skin contact. Use chemically resistant gloves if required.
Respiratory Equipment	As required. Avoid breathing product vapour.	
Hygiene Measures	Wash hands with soap & water after handling.	
Engineering Measures	Ensure good ventilation of working area.	

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	Mobile liquid
Colour	Yellow
Odour	Characteristic, fresh lemon peel
Relative Density	0.847 to 0.857 @ 20°C
Flash Point (°C)	N/A
Refractive Index	1.472 to 1.478 @ 20°C
Melting Point (°C)	N/A
Boiling Point (°C)	N/A
Vapour Pressure	N/A
Solubility in Water @20°C	N/A
Auto-ignition temperature (°C)	N/A

9.2 Other information

N/A

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SECTION 10: Stability and reactivity

10.1 Reactivity

It presents no significant reactivity hazards, by itself or in contact with water.

10.2 Chemical stability

Stable under normal temperature conditions.

10.3 Possibility of hazardous reactions

None

10.4 Conditions to avoid

Avoid storage temperatures above 25°C.

10.5 Incompatible materials

Avoid contact with strong acids, alkalis and oxidising agents.

10.6 Hazardous decomposition products

Liable to cause smoke & acrid fumes during combustion: carbon monoxide, carbon dioxide & other non-identified organic compounds may be formed.

SECTION 11: Toxicological information

11.1 Information on toxicological effects.

Acute toxicity:	Acute oral toxicity: LD50 oral rat >2840 mg/kg (NIOSH 1975) Dermal toxicity: LD ₅₀ skin rabbit >5000.00 mg/kg <i>FCTXAV 12,725</i> (1974)
Skin corrosion / irritation:	Skin irritation skin-rabbit 500.00 mg/24hours moderate <i>FCTXAV 12,725</i> (1974) Hazard Category 2 under EC 1272/2008 guidelines
Serious eye damage/irritation:	Not classified under EC 1272/2008 guidelines.
Respiratory or skin sensitisation:	Skin sensitizer Hazard Category 1 under EC 1272/2008 guidelines
Germ cell mutagenicity:	The mutagenicity and photomutagenicity of the mixtures of coumarins and furocoumarins in lemon oil have not been assessed.
Carcinogenicity:	Not listed by as a known carcinogen by IARC, UN NTP, Calif Prop 65, US EPA and TRIC.
Reproductive toxicity:	Not listed under Calif. Prop 65, or by US TRI as a developmental toxin
STOT-single exposure:	No data found
STOT-repeated exposure:	No data found
Aspiration hazard:	Aspiration Hazard Category 1 under EC 1272/2008 guidelines.
Other information:	The phototoxicity elicited by cold-pressed lemon oil has been associated with naturally occurring and furocoumarins & coumarins. Two of these furocoumarins, 5-methoxypsoralen and oxypeucedanin, are the probable phototoxins but the concentration of these furocoumarins have been found to vary significantly with growing conditions

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SECTION 12: Ecological information

12.1 Toxicity

Listed as Acute aquatic hazard Category 2 & Chronic aquatic hazard long-term Category 2 Under EC 1272/2008.

12.2 Persistence and degradability

No data found.

12.3 Bio-accumulative potential

No data found.

12.4 Mobility in soil

No data found.

12.5 Results of PBT and VPVB assessment

No data found.

12.6 Other adverse effects


N/A

SECTION 13: Disposal considerations

13.1 Waste Treatment Methods

Do not release into the environment. Collect waste into suitable containers and contact hazardous chemical disposal company.

SECTION 14: Transport information

Warning Icon	
Proper Shipping Name	EXTRACTS, AROMATIC, LIQUID
UN No. Road	UN 1169
ADR Class	Class 3
Hazard No (ADR)	30
Hazchem Code	3YE
UN No. SEA	UN 1169
IMDG Class	Class 3
IMDG Pack Gr.	Pk Gp III
EMS	F-E, S-D
UN No. AIR	UN 1169
Air Class	Class 3
Air Pack Gr.	Pk Gp III

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SECTION 15: Regulatory information

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

EU Directives	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 th Dec 2006 Concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 199/45/EC and repealing Council Regulation Council Regulation (EEC) No793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, and 93/105/EEC and 2000/21/EC including amendments.
Statutory Instruments	The Chemicals (Hazard Information and Packaging for Supply Regulations 2009 (S.I. 2009 No 716).
Approved Code of Practice	Classification and Labelling of Substances and Preparations Dangerous for Supply. Safety Data Sheets for Substances and Preparations
Guidance Notes	Workplace Exposure Limits EH40. CHIP for everyone HSG 108.

15.2 Chemical safety assessment

An assessment has not been executed as this is not a hazardous material according to article 31 of REACH 1907/2006.

SECTION 16: Other information

Training instructions: Refer to possible hazard before use of this product.

Abbreviations and acronyms:

MSDS	Material Safety Data Sheet
INCI	International Nomenclature of Cosmetic Ingredients
CAS	Chemical Abstract Service
IMDG	International Maritime Code for Dangerous Goods
ADR	Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID	International Carriage of Dangerous Goods by Rail
ICAO	International Civil Aviation Organization
ADN	International Carriage of Dangerous Goods by Inland Waterways
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
Trem Card	Transport Emergency Card
STOT	Specific Target Organ Toxicity
N/A	Not Available
Risk Phrases in full:	R10 Flammable R38 Irritating to skin R43 May cause sensitisation by skin contact R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment R65 Harmful may cause lung damage if swallowed.
Hazard Statements in full:	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 H411 Toxic to aquatic life with long-lasting effects.

Complies with REACH guidance for SDS as circulated by ECHA 2011.

