

# Lemon Distilled Essential Oil

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830  
Date of issue: 2019/02/25 Version: 1.0

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form	: Substance
Substance name	Lemon Distilled Essential Oil
Chemical name	: Citrus Limon Oil
EC-No.	284-515-8
CAS-No.	84929-31-7 / 8008-56-8
REACH registration No	01-2119495512-35
Product code	103
Synonyms	Citrus limon, (L) BURM. f.
Other means of identification	: Essential oil extracted by physical means from the outer part of fresh lemon fruits

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

##### 1.2.1. Relevant identified uses

Industrial/Professional use spec	: For professional use only Industrial
Use of the substance/mixture	: Cosmetics

##### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

Naturpolc Magyarország Kft.  
Klapka street 4. Budapest 1193 Hungary  
[www.naturpolc.hu](http://www.naturpolc.hu)

#### 1.4. Emergency telephone number

No additional information available

### SECTION 2: Hazards identification

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flammable liquids, Category 3	H226
Skin corrosion/irritation, Category 2	H315
Skin sensitisation, Category 1	H317
Aspiration hazard, Category 1	H304
Hazardous to the aquatic environment — Chronic Hazard, Category 2	H411
Full text of H statements : see section 16	

#### Adverse physicochemical, human health and environmental effects

Flammable liquid and vapour. 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

##### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



GHS02 GHS07 GHS08 GHS09

Signal word (CLP)	: Danger
Hazard statements (CLP)	: 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.

# Lemon Distilled Essential Oil

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Precautionary statements (CLP) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P262 - Do not get in eyes, on skin, or on clothing.  
P264 - Wash hands, forearms and face thoroughly after handling.  
P273 - Avoid release to the environment.  
P280 - Wear protective clothing, eye protection, face protection.  
P301+P310 - IF SWALLOWED: Immediately call a doctor, a POISON CENTER.  
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.  
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.  
P331 - Do NOT induce vomiting.  
P405 - Store locked up.  
P501 - Dispose of contents to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

### 2.3. Other hazards

No additional Information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Name : Lemon Distilled Essential Oil  
CAS-No. : 84929-31 -7 / 8008-56-8  
EC-No. : 284-515-8

Name	Product identifier	%
Limonene	(CAS-No.) 5989-27-5 (EC-No.) 227-813-5	62 - 72
Beta-Pinene	(CAS-No.) 127-91-3 (EC-No.) 204-872-5	<= 16
gamma-Terpinene	(CAS-No.) 99-85-4 (EC-No.) 202-794-6	<= 11
Citral	(CAS-No.) 5392-40-5 (EC-No.) 226-394-6	<= 3,3
Alpha-Pinene	(CAS-No.) 80-56-8 / 7785-26-4 (EC-No.) 201-291-9	<= 3
Myrcene	(CAS-No.) 123-35-3 (EC-No.) 204-622-5	<= 3

Full text of H-statements: see section 16

### 3.2. Mixtures

Not applicable

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If you feel unwell, seek medical advice.  
First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.  
First-aid measures after eye contact : 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.  
First-aid measures after ingestion : Do not induce vomiting. Get medical advice/attention. Rinse mouth.

### 4.2. Most important 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 of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media Unsuitable extinguishing media : Dry powder. Foam. Carbon dioxide.  
: Do not use a heavy water stream.

# Lemon Distilled Essential Oil

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

Fire hazard : Flammable liquid and vapour.

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

## 5.3. Advice for firefighters

Precautionary measures fire : Evacuate area. Eliminate all ignition sources if safe to do so. Stop leak if safe to do so.

---

# Lemon Distilled Essential Oil

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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

### SECTION 6: Accidental release measures

General measures : Stop leak if safe to do so. Remove ignition sources. Evacuate area.

#### 6.1.1. For non-emergency personnel

Protective equipment Emergency procedures

: Wear recommended personal protective equipment.  
: Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid contact with skin and eyes.

#### 6.1.2. For emergency responders

Protective equipment

: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

#### 6.2. Environmental precautions

Avoid release to the environment. Prevent liquid from entering sewers, watercourses, underground or low areas.

#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up

: Store away from other materials. On land, sweep or shovel into suitable containers. Clean up any spills as soon as possible, using an absorbent material to collect it. Minimise generation of dust.

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.

### SECTION 7: Handling and storage

Precautions for safe handling

: Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear personal protective equipment. Avoid contact with skin and eyes.

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

Technical measures

: Ground/bond container and receiving equipment.

Storage conditions

: Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Storage temperature

: 5 - 20 °C

#### 7.3. Specific end use(s)

No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

Beta-Pinene (127-91-3)		
Germany	TRGS 910 Acceptable concentration notes	
USA - ACGIH	ACGIH TWA (ppm)	20 ppm

Alpha-Pinene (80-56-8 / 7785-26-4)		
Germany	TRGS 910 Acceptable concentration notes	
USA - ACGIH	ACGIH TWA (ppm)	20 ppm

#### 8.2. Exposure controls

##### Appropriate engineering controls:

Ensure good ventilation of the work station.

##### Personal protective equipment:

EN 374.

##### Hand protection:

Protective gloves

# Lemon Distilled Essential Oil

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

### Eye protection:

Safety glasses

### Skin and body protection:

Wear suitable protective clothing

### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment



### Personal protective equipment symbol(s):

### Environmental exposure controls:

Avoid release to the environment.

### Other information:

Do not eat, drink or smoke when using this product.

## SECTION 9: Physical and chemical properties

### 9.1.

Physical state	Liquid
Colour	Colourless.
Odour	characteristic.
Odour 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	160 °C
Flash point	- 48 °C
Auto-ignition temperature	235 °C
Decomposition temperature	No data available
Flammability (solid, gas)	Not applicable
Vapour pressure	218,8 Pa at 25 °C
Relative vapour density at 20 °C	No data available
Relative density	= 0,85
Solubility	Ethanol: soluble in alcohol
Log Pow	No data available
Viscosity, kinematic	« 1280000 mm <sup>2</sup> /s at 20 °C
Viscosity, dynamic	1,09 mPa·s at 20 °C
Explosive properties	No data available
Oxidising properties	No data available
Explosive limits	No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Flammable liquid and vapour.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

### 10.5. Incompatible materials

No additional information available

# Lemon Distilled Essential Oil

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

### 10.6. Hazardous decomposition products

Carbon dioxide. Carbon monoxide.

## SECTION 11: Toxicological information

### 11.1.

Acute toxicity (oral)	:	Notclassified
Acute toxicity (dermal)	:	Notclassified
Acute toxicity (inhalation)	:	Notclassified

#### Lemon Distilled Essential Oil (84929-31-7 / 8008-56-8)

LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	>10000

#### Limonene (5989-27-5)

LD50 oral rat	4400 mg/kg
LD50 dermal	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 20 mg/l

#### Beta-Pinene (127-91-3)

LD50 dermal rat	= 4700 mg/kg
-----------------	--------------

#### Alpha-Pinene (80-56-8 / 7785-26-4)

#### Myrcene (123-35-3)

LD50 oral	> 2000 mg/kg
LD50 dermal	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 20 mg/l/4h

: Causes skin irritation.

Serious eye damage/irritation

: Not classified

Respiratory or skin sensitisation

: May cause an allergic skin reaction.

Germ cell mutagenicity

: Not classified

Carcinogenicity

: Not classified

LD50 oral rat	3700 mg/kg
---------------	------------

Reproductive toxicity

: Not classified

STOT-single exposure

: Not classified

STOT-repeated exposure

: Not classified

Aspiration hazard

: May be fatal if swallowed and enters airways.

Skin corrosion/irritation

#### Lemon Distilled Essential Oil (84929-31-7 / 8008-56-8)

Viscosity, kinematic	« 1280000 mm <sup>2</sup> /s at 20 °C
----------------------	---------------------------------------

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : Toxic to aquatic life with long lasting effects. Before neutralisation, the product may represent a danger to aquatic organisms.

Acute aquatic toxicity : Not classified

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

#### Lemon Distilled Essential Oil (84929-31-7 / 8008-56-8)

LC50 fish 1	5,65
EC50 Daphnia 1	1,1

## Lemon Distilled Essential Oil

EC50 72h algae (1)	150 mg/l
--------------------	----------

# Lemon Distilled Essential Oil

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

<b>Limonene (5989-27-5)</b>	
LC50 fish l	= 33 mg/l
EC50 Daphnia l	0,1 - 1 mg/l
ErC50 (algae)	0,1 - 1 mg/l

### 12.2. Persistence and degradability

<b>Limonene (5989-27-5)</b>	
Persistence and degradability	Not established. May cause long-term adverse effects in the environment.

<b>Beta-Pinene (127-91-3)</b>	
Persistence and degradability	Not established. May cause long-term adverse effects in the environment.

<b>gamma-Terpinene (99-85-4)</b>	
Persistence and degradability	Not established.

<b>Citral (5392-40-5)</b>	
Persistence and degradability	Not established.

<b>Alpha-Pinene (80-56-8 / 7785-26-4)</b>	
Persistence and degradability	Not established. May cause long-term adverse effects in the environment.

<b>Myrcene (123-35-3)</b>	
Persistence and degradability	Not established. May cause long-term adverse effects in the environment.

### 12.3. Bioaccumulative potential

<b>Limonene (5989-27-5)</b>	
Bioaccumulative potential	Not established.

<b>Beta-Pinene (127-91-3)</b>	
Bioaccumulative potential	Not established.

<b>gamma-Terpinene (99-85-4)</b>	
Bioaccumulative potential	Not established.

<b>Citral (5392-40-5)</b>	
Bioaccumulative potential	Not established.

<b>Alpha-Pinene (80-56-8 / 7785-26-4)</b>	
Bioaccumulative potential	Not established.

### Myrcene (123-35-3)

Log Pow	5,29
Bioaccumulative potential	Not established.

### 12.4. Mobility in soil

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



# Lemon Distilled Essential Oil

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.  
Must follow special treatment according to local regulation.

Additional information : Flammable vapours may accumulate in the container.

### SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number</b>				
UN 1169	UN 1169	UN 1169	UN 1169	UN 1169
<b>14.2. UN proper shipping name</b>				
EXTRACTS, AROMATIC, LIQUID	EXTRACTS, AROMATIC, LIQUID	Extracts, aromatic, liquid	EXTRACTS, AROMATIC, LIQUID	EXTRACTS, AROMATIC, LIQUID
<b>Transport document description</b>				
UN 1169 EXTRACTS, AROMATIC, LIQUID, 3, III, (D/E), ENVIRONMENTALLY HAZARDOUS	UN 1169 EXTRACTS, AROMATIC, LIQUID, 3, III, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS	UN 1169 Extracts, aromatic, liquid, 3, III, ENVIRONMENTALLY HAZARDOUS	UN 1169 EXTRACTS, AROMATIC, LIQUID, 3, III, ENVIRONMENTALLY HAZARDOUS	UN 1169 EXTRACTS, AROMATIC, LIQUID, 3, III, ENVIRONMENTALLY HAZARDOUS
<b>14.3. Transport hazard class(es)</b>				
3	3	3	3	3
\3/ \	\3/ \	\3/ /	\3/ /	\3/ /
<b>14.4. Packing group</b>				
III	III	III	III	III
<b>14.5. Environmental hazards</b>				
Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes

No supplementary information available

#### 14.6. Special precautions for user

##### Overland transport

Classification code (ADR) : F1  
 Special provisions (ADR) : 601  
 Limited quantities (ADR) : 51  
 Excepted quantities (ADR) : E1  
 Packing instructions (ADR) : P001, IBC03, LP01, R001  
 Mixed packing provisions (ADR) : MP19  
 Portable tank and bulk container instructions (ADR) : T2  
 Portable tank and bulk container special provisions (ADR) : TP1  
 Tank code (ADR) : LGBF  
 Vehicle for tank carriage : FL  
 Transport category (ADR) : 3  
 Special provisions for carriage - Packages (ADR) : V12  
 Special provisions for carriage - Operation (ADR) : S2  
 Hazard identification number (Kemler No.) : 30  
 Orange plates



# Lemon Distilled Essential Oil

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Tunnel restriction code (ADR)	D/E
EAC code	3YE
<b>Transport by sea</b>	
Special provisions (IMDG)	223, 955
Limited quantities (IMDG)	5 L
Excepted quantities (IMDG)	E1
Packing instructions (IMDG)	P001, LP01
IBC packing instructions (IMDG)	IBC03
Tank instructions (IMDG)	T2
Tank special provisions (IMDG)	TP1
EmS-No. (Fire)	F-E
EmS-No. (Spillage)	S-D
Stowage category (IMDG)	A
Properties and observations (IMDG)	Usually consist of alcoholic solutions. Miscibility with water depends upon the composition.
<b>Air transport</b>	
PCA Excepted quantities (IATA)	E1
PCA Limited quantities (IATA)	Y344
PCA limited quantity max net quantity (IATA)	10L
PCA packing instructions (IATA)	355
PCA max net quantity (IATA)	60L
CAO packing instructions (IATA)	366
CAO max net quantity (IATA)	220L
Special provisions (IATA)	A3
ERG code (IATA)	3L
<b>Inland waterway transport</b>	
Classification code (ADN)	F1
Special provisions (ADN)	601
Limited quantities (ADN)	5 L
Excepted quantities (ADN)	E1
Equipment required (ADN)	PP, EX, A
Ventilation (ADN)	VE01
Number of blue cones/lights (ADN)	0
<b>Rail transport</b>	
Classification code (RID)	F1
Special provisions (RID)	601
Excepted quantities (RID)	E1
Packing instructions (RID)	P001, IBC03, LP01, R001
Mixed packing provisions (RID)	MP19
Portable tank and bulk container instructions (RID)	T2
Portable tank and bulk container special provisions (RID)	TP1
Tank codes for RID tanks (RID)	LGBF
Transport category (RID)	3
Special provisions for carriage - Packages (RID)	W12
Colis express (express parcels) (RID)	CE4
Hazard identification number (RID)	30

### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

## SECTION 15: Regulatory information

### 15.1.1. EU-Regulations

No REACH Annex XVII restrictions

Lemon Distilled Essential Oil is not on the REACH Candidate List

Lemon Distilled Essential Oil is not on the REACH Annex XIV List

Lemon Distilled 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.

# Lemon Distilled Essential Oil

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Lemon Distilled 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

### 15.1.2. National regulations

No additional information available

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

Full text of H- and EUH-statements:	
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
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.
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.

SDS EU (REACH Annex II)

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*