

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

#### 1.1. Product identifier

Product form	: Substance
Substance name	: Lemon Cold Pressed Essential Oil
EC Index-No.	: 284-515-8
EC-No.	: 284-515-8
CAS-No.	: 8008-56-8 / 84929-31-7
REACH registration No	: 01-2119495512-35
Product code	: 153
Other means of identification	: Citrus Limon Peel Oil is the volatile oil obtained by cold compression of the fresh peel of the Lemon, Citrus limon (L.), Rutaceae.

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

##### 1.2.1. Relevant identified uses

Main use category	: Industrial use, Professional use
Use of the substance/mixture	: Flavours, Fragrances: Use in accordance with good manufacturing and industrial hygiene practices. Not for personal use in this concentration.

##### 1.2.2. Uses advised against

No additional information available

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

Naissance  
Unit 9 & 11 Milland Road Industrial Estate  
Milland Road  
SA11 1NJ Neath - United Kingdom  
[www.discoveringbetter.com](http://www.discoveringbetter.com)

#### 1.4. Emergency telephone number

No additional information available

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### 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 1	H410

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. Very toxic to aquatic life with long lasting effects.

#### 2.2. Label elements

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

Hazard pictograms (CLP)



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.  
H410 - Very toxic to aquatic life with long lasting effects.

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Precautionary statements (CLP) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P241 - Use explosion-proof electrical, ventilating and lighting equipment.  
P262 - Do not get in eyes, on skin, or on clothing.  
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.  
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 and container to an approved waste disposal plant.

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

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

Name	Product identifier	%
Limonene	(CAS-No.) 5989-27-5 (EC-No.) 227-813-5	≈ 66
Beta-Pinene	(CAS-No.) 127-91-3 (EC-No.) 204-872-5	≈ 13
gamma-Terpinene	(CAS-No.) 99-85-4 (EC-No.) 202-794-6	≈ 9
Citral	(CAS-No.) 5392-40-5 (EC-No.) 226-394-6	≈ 3
Alpha-Pinene	(CAS-No.) 80-56-8 / 7785-26-4 (EC-No.) 201-291-9	≈ 2.5
Sabinene	(CAS-No.) 3387-41-5 (EC-No.) 222-212-4	≈ 1.5
Myrcene	(CAS-No.) 123-35-3 (EC-No.) 204-622-5	≈ 1.5

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. Get immediate medical advice/attention.  
First-aid measures after skin contact : Rinse skin with water/shower. Take off immediately all contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.  
First-aid measures after eye contact : Rinse eyes with water as a precaution.  
First-aid measures after ingestion : Do not induce vomiting. Rinse mouth. Get immediate medical advice/attention.

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

### 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.

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### 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.  
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

### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Evacuate area. Stop leak if safe to do so. Eliminate every possible source of ignition.

#### 6.1.1. For non-emergency personnel

Emergency procedures : 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 from entering sewers, basements and workpits, or any place where its accumulation can be dangerous.

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

Methods for cleaning up : 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. Store away from other materials.

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

### 7.1. Precautions for safe handling

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. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. 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.

Storage temperature : 5 - 20 °C Store in a dry, aerated place away from heat and ignition sources

### 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. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

#### Personal protective equipment:

EN 374. EN 166.

#### Hand protection:

Protective gloves

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<b>Eye protection:</b>
Safety glasses
<b>Skin and body protection:</b>
Wear suitable protective clothing
<b>Respiratory protection:</b>
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. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Yellow to greenish.
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	: $\approx 170 \pm 10^\circ\text{C}$ @ 1026hPa
Flash point	: $\approx 49^\circ\text{C}$
Auto-ignition temperature	: $\approx 235$
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: 186.4 Pa @25°C
Relative vapour density at 20 °C	: No data available
Relative density	: 0.846 - 0.856 @ 20°C
Solubility	: Water: Insoluble Ethanol: Soluble in alcohol
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

### 9.2. Other information

Bulk density	: 1.472 - 1.478 @ 20°C
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## 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. No flames, no sparks. Eliminate all sources of ignition. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

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### 10.5. Incompatible materials

Strong bases. Strong acids. Oxidizing agent.

### 10.6. Hazardous decomposition products

Carbon dioxide. Carbon monoxide.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified  
Acute toxicity (dermal) : Not classified  
Acute toxicity (inhalation) : Not classified

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

LD50 oral rat	5000
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
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#### Alpha-Pinene (80-56-8 / 7785-26-4)

LD50 oral rat	3700 mg/kg
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#### Myrcene (123-35-3)

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

Skin corrosion/irritation : 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  
Reproductive toxicity : Not classified  
STOT-single exposure : Not classified  
STOT-repeated exposure : Not classified  
Aspiration hazard : May be fatal if swallowed and enters airways.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : Very toxic to aquatic life with long lasting effects.  
Acute aquatic toxicity : Not classified  
Chronic aquatic toxicity : Very toxic to aquatic life with long lasting effects.

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

LC50 fish 1	0.341 mg/l
EC50 Daphnia 1	0.313 mg/l
EC50 72h algae (1)	0.523 mg/l

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

LC50 fish 1	≈ 33 mg/l
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EC50 Daphnia 1	0.1 - 1 mg/l
ErC50 (algae)	0.1 - 1 mg/l

### 12.2. Persistence and degradability

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

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

Persistence and degradability	Not established. May cause long-term adverse effects in the environment.
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#### gamma-Terpinene (99-85-4)

Persistence and degradability	Not established.
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#### Citral (5392-40-5)

Persistence and degradability	Not established.
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#### Alpha-Pinene (80-56-8 / 7785-26-4)

Persistence and degradability	Not established. May cause long-term adverse effects in the environment.
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#### Sabinene (3387-41-5)

Persistence and degradability	Not established.
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#### Myrcene (123-35-3)

Persistence and degradability	Not established. May cause long-term adverse effects in the environment.
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### 12.3. Bioaccumulative potential

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

Bioaccumulative potential	Not established.
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#### Beta-Pinene (127-91-3)

Bioaccumulative potential	Not established.
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#### gamma-Terpinene (99-85-4)

Bioaccumulative potential	Not established.
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#### Citral (5392-40-5)

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

Bioaccumulative potential	Not established.
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#### Sabinene (3387-41-5)

Bioaccumulative potential	Not established.
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#### Myrcene (123-35-3)

Log Pow	5.29
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Bioaccumulative potential	Not established.
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### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

No additional information available

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### 12.6. Other adverse effects

No additional information available

## 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
<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) : 5I  
 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

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Orange plates



Tunnel restriction code (ADR) : D/E  
EAC code : 3YE

### Transport by sea

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.

### Air transport

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

### Inland waterway transport

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

### Rail transport

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

#### 15.1.1. EU-Regulations



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No REACH Annex XVII restrictions

Lemon Cold Pressed Essential Oil is not on the REACH Candidate List

Lemon Cold Pressed Essential Oil is not on the REACH Annex XIV List

Lemon Cold Pressed 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 Cold Pressed 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
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
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
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.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H410	Very 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*