



SAFETY DATA SHEET

GHS: According to 2015/830/EU

Code Number: EO100591

Version 5 Revised 21/04/2020

Section 1. Identification of the substance/mixture and of the company/undertaking

1.1 Product Identifier

Product Name	LEMON ESSENTIAL OIL - CP ABP
Code Number	EO100591 - EOLEM
Alternative Name	INCI Name: Citrus Limon Peel Oil
REACH Reg No	Not registered

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

Concentrated material for manufacturing purposes only

1.3 Details of the supplier of the safety data sheet

Pure Ingredients Ltd
626A Rosebank Road, Avondale
Auckland 1026
New Zealand

Telephone Number +09 813 5619

Email Address compliance@pureingredients.co.nz

1.4 Emergency Tel No 111 / NZ Poisons Centre **0800 POISON** (0800 764 766)

Emergency Response: 0800 CHEMCALL / 0800 243 622 (24hr)

Section 2. Hazard Identification

2.1 Classification of the substance or mixture

FL 3*(3.1C)	Flammable liquid, category 3
AH 1*(6.1E)	Aspiration hazard, category 1
SCI 2*(6.3A)	Skin corrosion/irritation, category 2
SS 1*(6.5B)	Skin sensitisation, category 1
EH C1*(9.1A)	Aquatic hazard, chronic, category 1

SAFETY DATA SHEET

GHS: According to 2015/830/EU

Code Number: EO100591

Version 5 Revised 21/04/2020

2.2 Label elements

GHS classification according to Regulation (EC) No 1272/2008

Hazard Pictograms



Signal Word Danger

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 |
| H410 | Very toxic to aquatic life with long lasting effects |

Precautionary Statements

- | | |
|-----------|--|
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P261 | Avoid breathing fumes. |
| P264 | Wash hands thoroughly after handling |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves and eye protection |
| P301+P310 | IF SWALLOWED: Immediately call a POISON CENTRE. |
| P302+P352 | IF ON SKIN: Wash with plenty of water. |
| P331 | Do NOT induce vomiting. |
| P333+P313 | If skin irritation or rash occurs: Get medical advice. |
| P403+P235 | Store in a well-ventilated place. Keep cool. |
| P501 | Dispose of contents and container in accordance with local regulation. |

SAFETY DATA SHEET

GHS: According to 2015/830/EU

Code Number: EO100591

Version 5 Revised 21/04/2020

2.3 Other Hazards

Contains Citral, Citronellol, Limonene and Linalool which may produce an allergic reaction

No further information available at this time

Section 3. Composition / information on ingredients

Any percentage values listed here for hazardous components are for illustrative purposes only

3.1 Substances

Description	LEMON OIL COLD PRESSED
EC/EINECS	284-515-8
CAS Number	84929-31-7
USCAS Number	8008-56-8

Hazardous components

ID Numbers	Chemical Name, Classification and Hazards	Conc (%)
CAS 5989-27-5 EINECS 227-813-5 REACH	d-Limonene (p-Mentha-1,8-diene) FL 3;SCI 2;SS 1B;AH 1;EH A1,C1 H226,H304,H315,H317,H400,H410	69.1000
CAS 127-91-3 EINECS 204-872-5 REACH	beta-Pinene FL 3;ATO 5(3500);SCI 2;SS 1B;AH 1 H226,H303,H304,H315,H317	11.8000
CAS 99-85-4 EINECS 202-794-6 REACH	gamma-Terpinene (p-Mentha-1,4-diene) FL 3;ATO 5(3850);SCI 3;AH 1 H226,H303,H304,H316	8.5000
CAS 80-56-8 EINECS 201-291-9 REACH	Pinenes FL 3;ATO 4;AH 1;SCI 2;EH A1,C1 H226,H302,H304,H315,H400,H410	1.8000
CAS 123-35-3 EINECS 204-622-5 REACH	beta-Myrcene FL 3;AH 1;SCI 2;EDI 2A H226,H304,H315,H319	1.5000
CAS 141-27-5 EINECS 205-476-5 REACH	Geranial (3,7-Dimethyl-2,6-octadienal) SCI 2;SS 1B;EDI 2A H315,H317,H319	1.1900
CAS 106-26-3 EINECS 203-379-2 REACH	Neral SCI 2;SS 1;EDI 2A H315,H317,H319	0.7000
CAS 495-61-4 EINECS 207-805-8 REACH	beta-Bisabolene (Bisabolene) AH 1;SCI 2;SS 1B H304,H315,H317	0.5000

SAFETY DATA SHEET

GHS: According to 2015/830/EU

Code Number: EO100591

Version 5 Revised 21/04/2020

CAS 141-12-8 EINECS 205-459-2 REACH	Neryl acetate	0.4000
CAS 586-62-9 EINECS 209-578-0 REACH	Terpinolene FL 4; ATO 5(3850); AH 1; SCI 3; SS 1B; EH A1, C1 (M factor 1) H227, H303, H304, H316, H317, H400, H410	0.3000
CAS 105-87-3 EINECS 203-341-5 REACH	Geranyl acetate SCI 2; SS 1; EH A2, C3 H315, H317, H401, H412	0.3000
CAS 87-44-5 EINECS 201-746-1 REACH	Caryophyllene AH 1; SS 1B H304, H317	0.2000
CAS 98-55-5 EINECS 202-680-6 REACH	Terpineol (alpha-Terpineol) FL 4; ATO 5(4300); SCI 2; EDI 2A; EH A2 H227, H303, H315, H319, H401	0.1200
CAS 13877-91-3 EINECS 237-641-2 REACH	Ocimene (3,7-Dimethyl-1,3,6-octatriene) FL 3; AH 1; SCI 3 H226, H304, H316	0.1000
CAS 78-70-6 EINECS 201-134-4 REACH	Linalool FL 4; SS 1B H227, H317	0.1000
CAS 99-83-2 EINECS 202-792-5 REACH	alpha-Phellandrene FL 3; SCI 3; AH 1 H226, H304, H316	0.0600
CAS 562-74-3 EINECS 209-235-5 REACH	Terpinene-4-ol (4-Terpineol) (4-Carvomenthenol) FL 4; ATD 5(2500); ATO 4(1300); SCI 2; EDI 2A; EH A3 H227, H302, H313, H315, H319, H402	0.0400
CAS 3338-55-4 EINECS 222-081-3 REACH	Ocimenes (cis-beta-Ocimene) FL 3; AH 1; SCI 3 H226, H304, H316	0.0400
CAS 106-22-9 EINECS 203-375-0 REACH	Citronellol (d,l-Citronellol) SCI 2; SS 1B; EDI 2A H315, H317, H319	0.0300

Refer to section 16 for the wording of listed classification and hazard statement codes

Section 4. First Aid measures

Take phrases in sections 2 into account

4.1 Description of first aid measures

After inhalation

Remove from the exposure area to fresh air, lay patient on back until breathing returns to normal. Contact a doctor if necessary.

SAFETY DATA SHEET

GHS: According to 2015/830/EU

Code Number: EO100591

Version 5 Revised 21/04/2020

After 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.

After eye contact

Flush with plenty of water for 15 minutes including under eyelid and seek medical advice if necessary.

After ingestion

Do NOT induce vomiting. Position to avoid aspiration should vomiting occur. Wash mouth with plenty of water and obtain medical advice immediately.

4.2 Most important symptoms and effects, both acute and delayed

Take phrases in sections 2 and 11 into account. No further information available at this time.

4.3 Indication of immediate medical attention and special treatment needed

Treat symptomatically.

Section 5. Fire-fighting measures

5.1 Extinguishing Media

Carbon dioxide, foam or dry powder.
DO NOT USE A DIRECT WATER JET.

5.2 Special hazards arising from the substance or mixture

May produce Carbon dioxide and unidentified organic compounds.

5.3 Advice for fire-fighters

Wear Self-Contained Breathing Apparatus (S.C.B.A.) and full protective clothing to minimise skin exposure. Avoid inhalation of vapours. Keep containers cool with water spray. Do not use direct water jet on burning material. Do not allow spillage of fire to enter drains or watercourses.

HazChem Code 3Y

Section 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Remove all sources of ignition. Avoid inhalation, skin and eye contact. Ensure proper ventilation. Evacuate all unnecessary personnel. If possible contain the spill.

6.2 Environmental precautions

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

SAFETY DATA SHEET

GHS: According to 2015/830/EU

Code Number: EO100591

Version 5 Revised 21/04/2020

6.3 Methods and material for containment and cleaning up

Soak up spillage with sand or other inert absorbant material such as earth or vermiculite; transfer used material to a suitable waste container and dispose in accordance with regulations. If large quantities of this material enter the waterways, contact the EPA or your local Waste Management Group.

6.4 Reference to other sections

Refer to information in Sections 7, 8 and 13

Section 7. Handling and storage

7.1 Precautions for safe handling

Maintain good occupational and personal hygiene. Avoid inhalation and contact with skin and eyes. Wear protective clothing and use safety glasses. Keep in original container or an alternative made from a compatible material.

7.2 Conditions for safe storage, including any incompatibilities

Store in tightly sealed original containers away from ignition sources and in a cool place. Avoid contact with incompatible materials that support combustion, such as strong oxidising agents.

7.3 Specific end use(s)

No further information available

Section 8. Exposure controls / personal protection

8.1 Control Parameters

No exposure standards have been established for this material by Work safe Australia. However as a matter of course avoid repeated or prolonged contact with the skin. Keep out of eyes. Do not ingest. Use with good ventilation, do not breathe vapour. Sensitive individuals may develop an allergic response.

8.2 Exposure controls

Engineering controls

Natural ventilation should be sufficient, however where vapours of mists are generated the use of a grounded mechanical exhaust ventilation system is recommended.

Individual protection measures

Refer to Section 5 for specific fire/chemical personal protective equipment advice. Always wash routinely before breaks, meals and at the end of the work period.

Eye/face protection

Use splash-proof safety glasses and face shield where splashing is possible.

Hand protection

Wear chemically resistant disposable gloves.

SAFETY DATA SHEET

GHS: According to 2015/830/EU

Code Number: EO100591

Version 5 Revised 21/04/2020

Other skin protection

Wear overalls. Depending on conditions in the workplace, additional body protection should be considered. Always wash routinely before breaks, meals and at the end of the work period.

Respiratory protection

Not generally required. Use inhalation protection in poorly ventilated areas

Thermal hazards

No information

Environmental exposure controls

Emissions from ventilation and process equipment should be checked to ensure compliance with environmental protection legislation.

National Exposure Standards

No exposure standards have been established for this material by Worksafe Australia.

Biological Limit Values

No biological limit allocated.

Section 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

FLASH POINT (°C)	47
APPEARANCE	Mobile liquid
COLOUR	Pale yellow to greenish-yellow
ODOUR	Fresh, zesty, somewhat sweet, citrus, lemon-peel
ODOUR THRESHOLD	Not available
pH @20 DEG C	Not available
MELTING/FREEZING POINT	-90 deg C
INITIAL BOILING POINT AND RANGE	178 deg C
EVAPORATION RATE	Not available
FLAMMABILITY (SOLID/GAS)	Flammable liquid and vapour
UPPER/LOWER FLAMMABILITY LIMITS	Not available
VAPOUR PRESSURE	2.3 hPa

SAFETY DATA SHEET

GHS: According to 2015/830/EU

Code Number: EO100591

Version 5 Revised 21/04/2020

VAPOUR DENSITY	Not available
SPECIFIC GRAVITY @ 20 deg C	0.85 to 0.858
SOLUBILITIES	Insoluble in water
PARTITION COEFF N-OCTANAL/WATER	Not available
AUTO-IGNITION TEMPERATURE	255 deg C
DECOMPOSITION TEMPERATURE	Not available
VISCOSITY @ 20 DEG C	Not available
EXPLOSIVE PROPERTIES	Not available
OXIDISING PROPERTIES	Not available

9.2 Other information

No further information available

Section 10. Stability and reactivity

10.1 Reactivity

Not determined

10.2 Chemical Stability

Stable under the recommended storage conditions (see section 7).

10.3 Possibility of hazardous reactions

No hazardous reactions if stored under suitable storage conditions.

10.4 Conditions to avoid

Avoid exposure to heat, sources of ignition, and open flame. Avoid exposure to air.

10.5 Incompatible materials

Keep away from oxidising agents and from highly alkaline or acidic material.

10.6 Hazardous decomposition products

During combustion may form carbon monoxide, carbon dioxide and unidentified organic compounds.

SAFETY DATA SHEET

GHS: According to 2015/830/EU

Code Number: EO100591

Version 5 Revised 21/04/2020

Section 11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity

May be harmful if swallowed.

LD50 oral (rat) - 2840mg/kg

LD50 dermal (rabbit) - >5000mg/kg

Skin corrosion / irritation

Causes skin irritation.

Serious eye damage / irritation

May irritate eyes.

Respiratory or skin sensitisation

May cause an allergic skin reaction.

Germ cell mutagenicity

No data

Carcinogenicity

No data

Reproductive toxicity

No data

STO-single exposure

No data

STO-repeated exposure

No data

Aspiration hazard

May be fatal if swallowed and enters airways.

Information on likely routes of exposure

No data

Symptoms related to the physical, chemical and toxicological characteristics

No data

Delayed and immediate effects as well as chronic effects from short and long-term exposure

No data

SAFETY DATA SHEET

GHS: According to 2015/830/EU

Code Number: EO100591

Version 5 Revised 21/04/2020

Interactive effects

No data

Other information

No data

Section 12. Ecological information

12.1 Toxicity

Very toxic to aquatic life with long lasting effects. Avoid contaminating waterways.

d-Limonene (5989-27-5)

LC50 fish 1(Lethal) - Pimephales promelas (fathead minnow) – 720µg/L – 96 h

EC50 (GLP) - Daphnia magna – 0.36mg/L – 48 h

Threshold limit 1 (GLP) - Desmodesmus subspicatus (green algae) – 150mg/L – 72 h

12.2 Persistence and degradability

Readily biodegradable in water.

12.3 Bioaccumulative potential

No data

12.4 Mobility in soil

Prevent contamination of soil, ground and surface water.

12.5 Results of PBT and vPvB assessment

No data

12.6 Other adverse effects

See sections 6, 7, 13 and 15.

Section 13. Disposal considerations

Please refer to the information in section 8 (Exposure controls and personal protection)

13.1 Waste treatment methods

Dispose in accordance with the law and local regulations. Treat as trade effluent.

SAFETY DATA SHEET

GHS: According to 2015/830/EU

Code Number: EO100591

Version 5 Revised 21/04/2020

14. Transport information

14.1 UN number

ADR	1169
IATA	1169
IMDG	1169

14.2 UN proper shipping name

ADR	EXTRACTS, AROMATIC, LIQUID
IATA	EXTRACTS, AROMATIC, LIQUID
IMDG	EXTRACTS, AROMATIC, LIQUID

14.3 Transport hazard class(es)

ADR	3
IATA	3
IMDG	3

14.4 Packing group

ADR	III
IATA	III
IMDG	III

Tunnel Code

14.5 Environmental Hazards

Dangerous for the environment. Marine pollutant.

14.6 Special precautions for user

Maritime Transport (International Maritime Dangerous Goods Code (IMDG Code)):

EmS: F-E, S-D

Marine Pollutant: Yes

Road and Rail Transport (Australian Dangerous Goods Code (ADG Code)):

HazChem Code 3Y

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable

SAFETY DATA SHEET

GHS: According to 2015/830/EU

Code Number: EO100591

Version 5 Revised 21/04/2020

Section 15. Regulatory information

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

Poisons Schedule: S5 CAUTION

HS Tariff Code: 3301.13.00

HSNO Approval Number: HSR002576

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out

Section 16. Other information

Full list of precautionary phrases

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P241	Use explosion-proof equipment.
P242	Use non-sparking tools.
P243	Take action to prevent static discharges.
P261	Avoid breathing fumes.
P264	Wash hands thoroughly after handling
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves and eye protection
P301+P310	IF SWALLOWED: Immediately call a POISON CENTRE.
P302+P352	IF ON SKIN: Wash with plenty of water.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P331	Do NOT induce vomiting.
P333+P313	If skin irritation or rash occurs: Get medical advice.
P362+P364	Take off all contaminated clothing and wash it before reuse.
P391	Collect spillage.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents and container in accordance with local regulation.

SAFETY DATA SHEET

GHS: According to 2015/830/EU

Code Number: EO100591

Version 5 Revised 21/04/2020

Wording of any hazard classes listed in section 3

FL 3	Flammable liquid, category 3
FL 4	Flammable liquid, category 4
ATO 4	Acute toxicity, oral, category 4
ATO 5	Acute toxicity, oral, category 5
AH 1	Aspiration hazard, category 1
ATD 5	Acute toxicity, dermal, category 5
SCI 2	Skin corrosion/irritation, category 2
SCI 3	Skin corrosion/irritation, category 3
SS 1	Skin sensitisation, category 1
SS 1B	Skin sensitisation, category 1B
EDI 2A	Eye damage/irritation, category 2A
EH A1	Aquatic hazard, acute, category 1
EH A2	Aquatic hazard, acute, category 2
EH A3	Aquatic hazard, acute, category 3
EH C1	Aquatic hazard, chronic, category 1
EH C3	Aquatic hazard, chronic, category 3

Wording of any hazard statements listed in section 3

H226	Flammable liquid and vapour
H227	Combustible liquid
H302	Harmful if swallowed
H303	May be harmful if swallowed
H304	May be fatal if swallowed and enters airways
H313	May be harmful in contact with skin
H315	Causes skin irritation
H316	Causes mild skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H400	Very toxic to aquatic life
H401	Toxic to aquatic life
H402	Harmful to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

SAFETY DATA SHEET

GHS: According to 2015/830/EU

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References and further information

KEY:

N/A = Not applicable

Version 1: GHS format, BV 23/01/2017

Version 2: Minor changes, BV 30/07/2019

Version 3: System update, BV 19/12/2019

Version 4: System update, BV 21/04/2020

Version 5: Minor changes, BV 21/04/2020

Authorised by: JJ 21/04/2020

The information contained in this Safety Data Sheet is obtained from current and reliable sources. Pure Ingredients Ltd provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This Safety Data Sheet summarises our best current knowledge of the health and safety hazard information of the product, but does not claim to be all inclusive. This document is intended only as a guide to the appropriate handling of this material.