Certificate of Analysis

PRODUCT DETAILS		
Product Name	**LITSEA CUBEBA OIL ORGANIC**	
Product Code	OCLITS	
INCI Name	Litsea cubeba fruit oil	
Batch Number	4365108	
Best Before End	July 2022	
Identification	EINEC No: 943-438-6	Cas No: 68855-99-2
	Fema No: 3846	

PHYSICAL AND CHEMICAL CHARACTERISTIC

	SPECIFICATION RANGE	RESULTS
Appearance	Liquid	Conforms
Colour	Pale yellow to yellow	Conforms
Odour	Characteristic	Conforms
Relative Density @20°c	0.878 - 0.905	0.8838
Refractive Index @ 20°c	1.475 - 1.490	1.4829

MAIN CONSTITUENTS

CONSTITUENT RANGE	RESULTS	CONSTITUENT RANGE	RESULTS	CONSTITUENT RANGE	RESULT
Geranial **≥24.84 - 43.0≤**	**38.84%**	Neral **≥20.24 - 35.0≤**	**29.29%**	Limonene **≥2.3 - 18.0≤**	**11.78%**
Citronellal **≥0.01 - 7.0≤**	**2.32%**	Sabinene **≥0.2 - 2.0≤**	**0.91%**	Myrcene **≥0.74 - 1.8≤**	**1.57%**
Verbenol **≥0.01 - 2.2≤**	**0.04%**	1,8-Cineole **≥0.31 - 1.7≤**	**1.28%**	1,alpha-(-)-Pinene **1-5%**	**1.34%**
Geraniol **≥0.01 - 2.9≤**	**1.25%**	6-Methyl-5-hepten-2-one **≥0.01 - 5.0≤**	**1.83%**	Linalool **≥0.01 - 3.3≤**	**1.72%**
Beta Caryophyllene **≥0.01 - 3.0≤**	**0.98%**	B-(+)-Citronellol **≥0.01 - 1.5≤**	**0.23%**	Nerol **≥0.18 - 1.2≤**	**0.57%**

STORAGE AND SHELF LIFE

Storage	Store in tightly closed container with minimum headspace in a cool, dark and dry
Shelf Life	12 months unopened and stored as above.

BiOrigins, 19-20 Sandleheath Industrial Estate, Fordingbridge, Hampshire, SP6 1PA, UK
Tel: 01425 655555 Email: technical@madarcorporation.co.uk

SAFETY DATA SHEET
LITSEA CUBEBA OIL ORGANIC

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

1.1. Product identifier

Product name	LITSEA CUBEBA OIL ORGANIC
Chemical name	Litsea Cubeba Essential Oil
Product number	OCLITS
REACH registration number	01-2120118332-70-0000
CAS number	68855-99-2
EC number	943-438-6
FEMA No:	3846

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

Identified uses Industrial, only for professional use

1.3. Details of the supplier of the safety data sheet

Supplier

MADAR Corporation Limited
19-20 Sandleheath Industrial Estate
Fordingbridge
Hampshire
SP6 1PA
Tel. +44 1425 655555 (Opening Hours 9am - 5pm)
E-mail: sales@madarcorporation.co.uk

Approved Sellers: Cosmetic Butters, Mystic Moments, New Directions, World of Moulds

1.4. Emergency telephone number

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards	Not Classified
Health hazards	Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317 Asp. Tox. 1 - H304
Environmental hazards	Aquatic Chronic 2 - H411

Human health	May be fatal if swallowed and enters airways. The product is irritating to eyes and skin.
Environmental	The product contains a substance which is toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

2.2. Label elements

EC number 943-438-6

LITSEA CUBEBA OIL ORGANIC

Pictogram

Signal word	Danger
Hazard statements	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. H411 Toxic to aquatic life with long lasting effects.
Precautionary statements	P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor. P302+P352 IF ON SKIN: Wash with plenty of water. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P331 Do NOT induce vomiting.
Contains	Geranial, Neral, (S)-p-mentha-1,8-diene, (+)-Citronellal, Sabinene, 1, 8 cineole, 1,alpha-(-)-Pinene, Geraniol, Nerol, ß-(+)-Citronellol
Supplementary precautionary statements	P261 Avoid breathing vapour/ spray. P264 Wash contaminated skin thoroughly after handling. P272 Contaminated work clothing should not be allowed out of the workplace. P321 Specific treatment (see medical advice on this label). P332+P313 If skin irritation occurs: Get medical advice/ attention. P333+P313 If skin irritation or rash occurs: Get medical advice/ attention. P337+P313 If eye irritation persists: Get medical advice/ attention. P362+P364 Take off contaminated clothing and wash it before reuse. P391 Collect spillage. P405 Store locked up. P501 Dispose of contents/ container in accordance with national regulations.

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Geranial **>=24.84 to <=43.0**

CAS number: 141-27-5 EC number: 205-476-5

Classification
Skin Irrit. 2 - H315
Skin Sens. 1 - H317

Neral **>=20.24 to <=35.0**

CAS number: 106-26-3 EC number: 203-379-2

Classification
Skin Irrit. 2 - H315
Skin Sens. 1 - H317

LITSEA CUBEBA OIL ORGANIC

(S)-p-mentha-1,8-diene **>=2.3 to <=18.0**

CAS number: 5989-54-8 EC number: 227-815-6

M factor (Acute) = 1 M factor (Chronic) = 1

Classification
Flam. Liq. 3 - H226
Skin Irrit. 2 - H315
Skin Sens. 1 - H317
Asp. Tox. 1 - H304
Aquatic Acute 1 - H400
Aquatic Chronic 1 - H410

(+)-Citronellal **>=0.01 to <=7.0**

CAS number: 2385-77-5 EC number: 219-194-5

Classification
Skin Irrit. 2 - H315
Eye Irrit. 2 - H319
Skin Sens. 1B - H317

Sabinene **>=0.2 to <=2.0**

CAS number: 3387-41-5 EC number: 222-212-4

M factor (Acute) = 1

Classification
Flam. Liq. 3 - H226
Skin Irrit. 2 - H315
Eye Irrit. 2 - H319
Skin Sens. 1 - H317
STOT SE 3 - H335
Aquatic Acute 1 - H400

7-methyl-3-methyleneocta-1,6-diene **>=0.74 to <=1.8**

CAS number: 123-35-3 EC number: 204-622-5

Classification
Flam. Liq. 3 - H226
Skin Irrit. 2 - H315
Eye Irrit. 2 - H319
Asp. Tox. 1 - H304

Verbenol **>=0.01 to <=2.2**

CAS number: 473-67-6 EC number: 207-470-8

Classification
Skin Irrit. 2 - H315

LITSEA CUBEBA OIL ORGANIC

1, 8 cineole **>=0.31 to <=1.7**

CAS number: 470-82-6 EC number: 207-431-5

Classification
Flam. Liq. 3 - H226
Skin Sens. 1B - H317

1,alpha-(-)-Pinene **1-5%**

CAS number: 7785-26-4 EC number: 232-077-3

M factor (Chronic) = 1

Classification
Flam. Liq. 3 - H226
Skin Irrit. 2 - H315
Eye Irrit. 2 - H319
Skin Sens. 1 - H317
STOT SE 3 - H335
Aquatic Chronic 1 - H410

Geraniol **>=0.01 to <=2.9**

CAS number: 106-24-1 EC number: 203-377-1

Classification
Skin Irrit. 2 - H315
Eye Dam. 1 - H318
Skin Sens. 1 - H317

6-Methyl-5-hepten-2-one **>=0.01 to <=5.0**

CAS number: 110-93-0 EC number: 203-816-7

Classification
Flam. Liq. 3 - H226

(-)-linalool **>=0.01 to <=3.3**

CAS number: 126-91-0 EC number: 204-811-2

Classification
Skin Irrit. 2 - H315
Eye Irrit. 2 - H319
STOT SE 3 - H335

Beta Caryophyllene **>=0.01 to <=3.0**

CAS number: 87-44-5 EC number: 201-746-1

Classification
Asp. Tox. 1 - H304

LITSEA CUBEBA OIL ORGANIC

Nerol	**>=0.18 to <=1.2**
CAS number: 106-25-2	EC number: 203-378-7
Classification Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317	

ß-(+)-Citronellol	**>=0.01 to <=1.5**
CAS number: 1117-61-9	EC number: 214-250-5
Classification Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1B - H317	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation Move affected person to fresh air at once. Get medical attention if any discomfort continues.

Ingestion Rinse mouth thoroughly with water. Do not induce vomiting. Get medical attention immediately.

Skin contact Remove contaminated clothing immediately and wash skin with soap and water.

Eye contact Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, as this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

4.2. Most important symptoms and effects, both acute and delayed

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Use as appropriate carbon dixoide (CO_2), dry chemical or foam

Unsuitable extinguishing media Do not use water, if avoidable.

5.2. Special hazards arising from the substance or mixture

Specific hazards In case of fire, the following can be released: carbon monoxide (CO), carbon dioxide (CO_2), smoke, soot.

5.3. Advice for firefighters

Protective actions during firefighting Avoid breathing fire gases or vapours. Containers close to fire should be removed or cooled with water.

Special protective equipment for firefighters Use protective equipment appropriate for surrounding materials.

LITSEA CUBEBA OIL ORGANIC

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation of the working area, evacuate personnel to safe area, wear suitable protective equipment. No smoking, sparks, flames or other sources of ignition near spillage. Avoid contact with skin and eyes. Avoid inhalation of vapours.

6.2. Environmental precautions

Environmental precautions Do not discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Cover with inert, inorganic, non-combustible material (e.g dry-lime, sand, soda ash). Place in covered containers and dispose of in accordance with local authority guidelines.

6.4. Reference to other sections

Reference to other sections For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid contact with skin and eyes. Do not breathe vapours. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use only in well-ventilated areas.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place.

7.3. Specific end use(s)

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

7-methyl-3-methyleneocta-1,6-diene (CAS: 123-35-3)

DNEL

Workers - Dermal; Long term systemic effects: 0.83 mg/kg
Workers - Inhalation; Long term systemic effects: 5.83 mg/m³
General population - Dermal; Long term systemic effects: 0.42 mg/kg
General population - Inhalation; Long term systemic effects: 1.25 mg/m³

PNEC

- STP; 0.2 mg/l
- Soil; 1.015 mg/kg
- Fresh water; 0.00028 mg/l
- Marine water; 0.0008 mg/l
- Sediment (Freshwater); 5.022 mg/kg
- Sediment (Marinewater); 0.502 mg/kg

1, 8 cineole (CAS: 470-82-6)

DNEL

Workers - Dermal; Long term systemic effects: 2 mg/kg
General population - Oral; Long term systemic effects: 600 mg/kg
General population - Dermal; Long term systemic effects: 1 mg/kg
General population - Inhalation; Long term systemic effects: 1.74 mg/m³

LITSEA CUBEBA OIL ORGANIC

PNEC	- STP; 10 mg/l - Soil; 0.2 mg/kg - Intermittent release; 0.57 mg/l - Fresh water; 0.057 mg/l - Marine water; 0.0057 mg/l - Sediment (Freshwater); 0.06732 mg/kg - Sediment (Marinewater); 0.00673 mg/kg

8.2. Exposure controls

Protective equipment

Appropriate engineering controls	Provide eyewash station
Eye/face protection	Personal protective equipment for eye and face protection should comply with European Standard EN166.
Hand protection	To protect hands from chemicals, gloves should comply with European Standard EN374.
Other skin and body protection	Wear protective clothing.
Hygiene measures	Good personal hygiene procedures should be implemented.
Respiratory protection	Generally unnecessary in a well ventilated area. If ventilation is insufficient, respiratory protection must be worn.
Environmental exposure controls	Avoid discharging into drains.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Pale yellow to yellow
Odour	Characteristic.
Melting point	REACH dossier information. Litsea Cubeba Oil is a mobile liquid at 20°c and a mobile liquid after 2 days at -20°c. Therefore, it was concluded that the melting point of Litsea Cubeba Oil is <-20°c.
Initial boiling point and range	REACH dossier information. 83 ± 10°c°C @ 1013 hPa
Flash point	REACH dossier information. 68.3±1°c°C CC (Closed cup).
Vapour pressure	REACH dossier information. 60.69 Pa @ 25°C
Relative density	0.878 - 0.905 @ 20°C
Solubility(ies)	REACH dossier information. The range of water solubilities of the known constituents of Litsea Cubeba oil was found to be 0.5 - 4364 mg/l at 25°c
Partition coefficient	REACH dossier information. The log Kow range of Litsea Cubeba oil constituents was found to be 2.06 - 6.3. 16.90% of the constituents has a log Kow >=4
Optical rotation	+3 to +12 @ 20°C

9.2. Other information

LITSEA CUBEBA OIL ORGANIC

Refractive index 1.475 - 1.4900 @ 20°C

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No hazardous reactions if stored and handled as prescribed / indicated.

10.2. Chemical stability

Stability Stable under normal conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None known.

10.4. Conditions to avoid

Conditions to avoid Keep away from heat, sparks and open flame.

10.5. Incompatible materials

Materials to avoid Strong acids. Strong alkalis. Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products Prolonged or excessive heat and/or exposure to air may cause decomposition or oxidation of the material.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

SECTION 12: Ecological Information

12.1. Toxicity

Acute toxicity - fish LL_{50}, 96 hour: 4.2 mg/l, Onchorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic invertebrates EL50, 48 hours: 4.2 mg/l, Daphnia magna

12.2. Persistence and degradability

Biodegradation Expected to be readily biodegradable.

12.3. Bioaccumulative potential

Partition coefficient REACH dossier information. The log Kow range of Litsea Cubeba oil constituents was found to be 2.06 - 6.3. 16.90% of the constituents has a log Kow >=4

12.4. Mobility in soil

12.5. Results of PBT and vPvB assessment

12.6. Other adverse effects

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Dispose of in compliance with all local and national regulations.

LITSEA CUBEBA OIL ORGANIC

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID)	3082
UN No. (IMDG)	3082
UN No. (ICAO)	3082
UN No. (ADN)	3082

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper shipping name (IMDG)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper shipping name (ICAO)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper shipping name (ADN)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

14.3. Transport hazard class(es)

ADR/RID class	9
ADR/RID classification code	M6
ADR/RID label	9
IMDG class	9
ICAO class/division	9
ADN class	9

Transport labels

14.4. Packing group

ADR/RID packing group	III
IMDG packing group	III
ICAO packing group	III
ADN packing group	III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

14.6. Special precautions for user

EmS	F-A, S-F
ADR transport category	3
Emergency Action Code	•3Z

LITSEA CUBEBA OIL ORGANIC

Hazard Identification Number (ADR/RID) 90

Tunnel restriction code (E)

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

SECTION 15: Regulatory information

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

EU legislation Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).
Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).

Guidance CHIP for everyone HSG228.

15.2. Chemical safety assessment

SECTION 16: Other information

Revision date 10/02/2017

Revision 2

Supersedes date 10/02/2017

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.
H318 Causes serious eye damage.
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.
H411 Toxic to aquatic life with long lasting effects.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

Product Specification

PRODUCT DETAILS		
Product Name	**LITSEA CUBEBA OIL ORGANIC**	
Product Code	OCLITS	
INCI Name	Litsea cubeba fruit oil	
Country of Origin	Vietnam	
Tariff Number	33012941	
Natural Status	We hereby declare, to the best of our knowledge and from information received from our supplier, that this product is in accordance to the requirements of Articles 3 (2) (d) of Regulation (EC) 1334/2008 and therefore can be designated as natural.	
Food Grade Status	We confirm, from information received from our supplier, that this product conforms with EU Regulations and can be used in food.	
Kosher Certified	Yes	
Halal Certified	We hereby delcare, from information received from our supplier, that this product does not contain any ingredient derived from animal origin, extracted from hair or feathers, animal fats, animal extracts, blood of any origin, blood plasma, pork and/or other meat products. This product does not contain alcohol (ethanol or grain alcohol) and has not been used in the manufacturing process.	
GMO Declaration	To the best of our knowledge and from information received from our supplier, this product does not derive from genetically modified starting raw material, or additives that are derived from genetically modifed organisms.	
Manufacturing Process	Obtained by steam distaillation from the fruits of litsea cubeba, Lauraceae and optionally by refined distillation.	
Identification	EINEC No: 943-438-6	Cas No: 68855-99-2
	Fema No: 3846	
PHYSICAL AND CHEMICAL CHARACTERISTIC		
Appearance	Liquid	
Colour	Pale yellow to yellow	
Odour	Characteristic	
Relative Density @20°c	0.878 - 0.905	
Refractive Index @ 20°c	1.475 - 1.490	
Initial Boiling Point and range	83 ± 10°c @ 1013 hPa	
Flash Point	68.3 ± 1°c (closed cup)	
Vapour Pressure @ 25°c	6.69 Pa	
Optical Rotation @ 20°c	+3 to +12	
FRAGRANCE ALLERGENS		
Citral (5392-40-5) **<=78%**	Citronellol (1117-61-9) **<=1.5%**	Geraniol (106-24-1) **<=2.9%**
Limonene (5989-27-5) **<=18.0%**	Linalool (78-70-6) **<=3.3**	
FOOD ALLERGENS		
NONE		
IFRA		
Citral (5392-40-5) **<=78%**	Citronellol (1117-61-9) **<=1.5%**	Geraniol (106-24-1) **<=2.9%**
STORAGE AND SHELF LIFE		
Storage	Store in tightly closed container with minimum headspace in a cool, dark and dry place.	
Shelf Life	12 months unopened and stored as above.	

Issue No: 1 10/02/2017

BiOrigins, 19-20 Sandleheath Industrial Estate, Fordingbridge, Hampshire, SP6 1PA, UK
Tel: 01425 655555 Email: technical@madarcorporation.co.uk

Vegan Statement

IDENTIFICATION	
Product:	Litsea Cubeba Oil Organic
Cas No:	68855-99-2
EINECS No:	943-438-6

STATEMENT

We, MADAR Corporation Limited, from information received from our supplier, hereby declare that the material listed above is compliant with a vegan or vegetarian diet.

It does not contain any animal ingredients or animal by products. No animal ingredients or by products are used in the manufacturing process.

This document represents to the best of our knowledge and from information received from our supplier. It does not release the buyer from the obligation to carry out an examination of the goods received. All uses made by the buyer are done under their own responsibility.