



Life - Health - Beauty

Certificate of Analysis

PRODUCT DETAILS		
Product Name	CITRONELLA JAVA OIL	
Product Code	OEICITR	
INCI Name	Cymbopogon	
Batch Number	4365805	
Best Before End	July 2022	
Manufacturing Process	Steam distillation of the freshly cut or partially dried grasses of Cymbopogon Winterianus.	
Identification	CAS No: 91771-61-8	EINECS No: 294-954-7
	Alternative Cas: 8000-29-1	FEMA No: 2308
	CoE: 39	FDA No: 182.20

PHYSICAL AND CHEMICAL CHARACTERISTIC		
	SPECIFICATION RANGE	RESULTS
Appearance	Liquid	Conforms
Colour	Pale yellow	Conforms
Odour	Characteristic	Conforms
Relative Density @ 20°C	0.850 - 0.950	0.8836
Refractive Index @ 20°C	1.450 - 1.490	1.4674

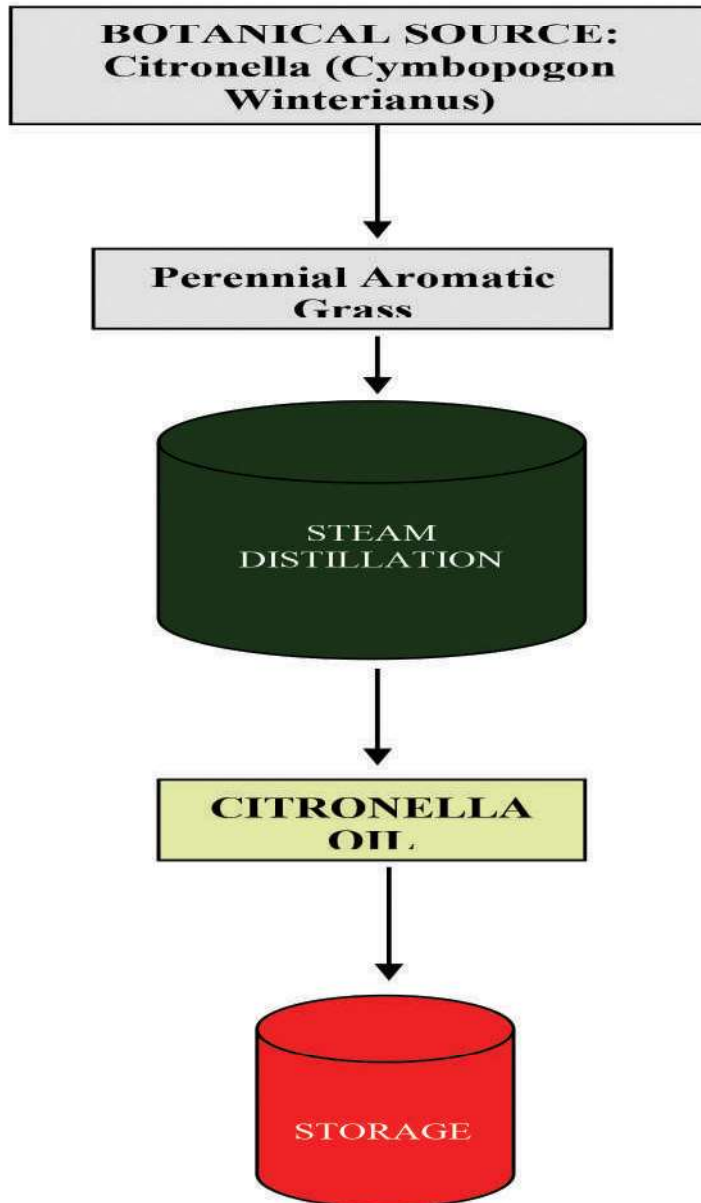
MAIN CONSTITUENTS					
CONSTITUENT RANGE	RESULTS	CONSTITUENT RANGE	RESULTS	CONSTITUENTS RANGE	RESULTS
(+) - Citronellal 7-43%	38.40%	Geraniol 19-49%	23.40%	Citronellol 8-14%	11.50%
Limonene 1.5-5%	5.10%	Geranyl Acetate 2-4%	3.30%	Muurolol (T&A) <0.01-3%	0.70%
Elemol 0.5-5%	1.70%	Citronellyl Acetate 1-4%	2.00%	Cadinenes (alpha, beta&gamma) 1-5%	1.10%
Germacrene D 0.50-3%	1.90%	Elemene Beta 0.50-3%	0.20%	Neo Iso Pulegol 0.50-3%	0.60%
Iso Pulegol <0.01-2%	0.60%	Eugenol 0.50-1.50%	0.10%	Geraniol <0.01-11%	ND
Linalool <0.01-2%	0.80%	Nerol <0.01-1%	0%	Neryl Acetate <0.01-<1%	0.80%
Farnseol <0.01-<1%	0.10%	Beta Caryophyllene <0.01-3.5%	0.10%	Terpineol (alpha, beta&gamma) <0.01-<1%	ND
DL Borneol <0.01-<1%	0.20%	Decanal <0.01-<1%	0.10%	Sabiene <0.01-<1%	0.13%
Myrcene <0.01-<1%	0.08%	A Terpinolene <0.01-<1%	0.10%	Beta Phellandrene <0.01-<1%	0.10%
Alpha Pinene <0.01-<1%	0.06%	P-Cymene <0.01-<1%	ND	Cis-beta-Ocimene <0.01-<1%	ND

STORAGE AND SHELF LIFE	
Storage	Store in tightly closed container with minimum headspace in a cool, dark and dry place.
Shelf Life	36 months unopened and stored as above.

DISCLAIMER: 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 users responsibility to satisfy himself as to the suitability of such information for his own particular use. Where MADAR Corporation make a declaration that allergenic material are not present in any product, this statement is made assuming reasonable levels of detection. It is impossible to guarantee the "absolute absence" of any material. It is the ultimate responsibility of the customer to ensure the safety of the intended final product containing this material, by carrying out additional tests if necessary.

Issue No: 1

CITRONELLA JAVA OIL FLOW CHART





SAFETY DATA SHEET CITRONELLA JAVA OIL

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

1.1. Product identifier

Product name	CITRONELLA JAVA OIL
Product number	OECITR
Synonyms; trade names	Cymbopogon Winterianus
REACH registration number	01-2120741487-48-XXXX
CAS number	91771-61-8
EC number	294-954-7

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

Identified uses	Suitable for use in cosmetics,, fragrances, flavourings and professional applications only.
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1.3. Details of the supplier of the safety data sheet

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

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	Acute Tox. 4 - H302 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Asp. Tox. 1 - H304
Environmental hazards	Aquatic Chronic 2 - H411
Human health	Causes serious eye irritation May irritate eyes and skin. Fatal if swallowed
Environmental	The product contains a substance which is toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

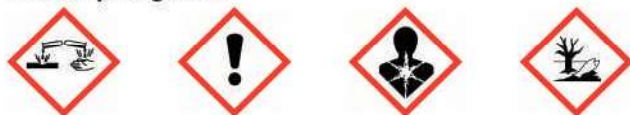
2.2. Label elements

EC number	294-954-7
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CITRONELLA JAVA OIL



Hazard pictograms



Signal word

Danger

Hazard statements

H302 Harmful if swallowed.
 H318 Causes serious eye damage.
 H317 May cause an allergic skin reaction.
 H411 Toxic to aquatic life with long lasting effects.
 H304 May be fatal if swallowed and enters airways.

Precautionary statements

P261 Avoid breathing vapour/ spray.
 P264 Wash contaminated skin thoroughly after handling.
 P270 Do not eat, drink or smoke when using this product.
 P272 Contaminated work clothing should not be allowed out of the workplace.
 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.
 P301+P312 IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell.
 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.
 P321 Specific treatment (see medical advice on this label).
 P330 Rinse mouth.
 P331 Do NOT induce vomiting.
 P333+P313 If skin irritation or rash occurs: 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.

Contains

(+)-Citronellal, Geraniol, Citronellol, (R)-p-mentha-1,8-diene, Geranyl Acetate, Elemol, Neo Iso Pulegol, Iso Pulegol, Eugenol, Geranial, Linalool, Nerol, Neryl Acetate, Farnesol, Beta Caryophyllene

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

(+)-Citronellal	7-43%
CAS number: 2385-77-5	EC number: 219-194-5
Classification	
Skin Irrit. 2 - H315	
Eye Irrit. 2 - H319	
Skin Sens. 1B - H317	

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Geraniol		19-49%
CAS number: 106-24-1	EC number: 203-377-1	
Classification		
Skin Irrit. 2 - H315		
Eye Dam. 1 - H318		
Skin Sens. 1 - H317		
Citronellol		8-14%
CAS number: 106-22-9	EC number: 203-375-0	
Classification		
Skin Irrit. 2 - H315		
Eye Irrit. 2 - H319		
Skin Sens. 1 - H317		
(R)-p-mentha-1,8-diene		1.5 - 5%
CAS number: 5989-27-5	EC number: 227-813-5	
M factor (Acute) = 1		
Classification		
Flam. Liq. 3 - H226		
Skin Irrit. 2 - H315		
Skin Sens. 1 - H317		
Asp. Tox. 1 - H304		
Aquatic Acute 1 - H400		
Aquatic Chronic 3 - H412		
Geranyl Acetate		2 - 4%
CAS number: 105-87-3	EC number: 203-341-5	
Classification		
Skin Irrit. 2 - H315		
Skin Sens. 1B - H317		
Aquatic Chronic 3 - H412		
Elemol		0.5-5%
CAS number: 639-99-6	EC number: 245-842-1	
Classification		
Skin Irrit. 2 - H315		
Skin Sens. 1 - H317		
Aquatic Chronic 2 - H411		

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Citronellyl Acetate	1-4%
CAS number: 150-84-5	EC number: 205-775-0
Classification	
Skin Irrit. 2 - H315	
Aquatic Chronic 2 - H411	
Neo Iso Pulegol	0.50-3%
CAS number: 96612-21-4	
Classification	
Acute Tox. 4 - H302	
Skin Irrit. 2 - H315	
Eye Irrit. 2 - H319	
Iso Pulegol	<0.01-2%
CAS number: 89-79-2	EC number: 201-940-6
Classification	
Acute Tox. 4 - H302	
Skin Irrit. 2 - H315	
Eye Irrit. 2 - H319	
Eugenol	0.50-1.50%
CAS number: 97-53-0	EC number: 202-589-1
Classification	
Eye Irrit. 2 - H319	
Skin Sens. 1 - H317	
Asp. Tox. 1 - H304	
Geranial	<0.01-11%
CAS number: 141-27-5	EC number: 205-476-5
Classification	
Skin Irrit. 2 - H315	
Eye Irrit. 2 - H319	
Skin Sens. 1 - H317	
Linalool	<0.01-2%
CAS number: 78-70-6	EC number: 201-134-4
Classification	
Skin Irrit. 2 - H315	
Eye Irrit. 2 - H319	
Skin Sens. 1 - H317	

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Nerol		<0.01-<1%
CAS number: 106-25-2	EC number: 203-378-7	
Classification		
Skin Irrit. 2 - H315		
Eye Dam. 1 - H318		
Skin Sens. 1 - H317		
Neryl Acetate		<0.01-<1%
CAS number: 141-12-8	EC number: 205-459-2	
Classification		
Skin Sens. 1 - H317		
Farnesol		<0.01-<1%
CAS number: 4602-84-0	EC number: 225-004-1	
M factor (Acute) = 1	M factor (Chronic) = 1	
Classification		
Skin Irrit. 2 - H315		
Skin Sens. 1 - H317		
Aquatic Acute 1 - H400		
Aquatic Chronic 1 - H410		
Beta Caryophyllene		<0.01-3.5%
CAS number: 87-44-5	EC number: 201-746-1	
Classification		
Skin Sens. 1B - H317		
Asp. Tox. 1 - H304		
Aquatic Chronic 4 - H413		
Decanal		<0.01-<1%
CAS number: 112-31-2	EC number: 203-957-4	
M factor (Acute) = 1		
Classification		
Eye Irrit. 2 - H319		
Aquatic Acute 1 - H400		
Aquatic Chronic 3 - H412		

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

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Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention promptly if symptoms occur after washing.
Eye contact	Rinse cautiously with water for several minutes. Remove any contact lenses and open eyelids wide apart. Continue to rinse. Get medical attention immediately.

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.
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SECTION 5: Firefighting measures**5.1. Extinguishing media**

Suitable extinguishing media	Carbon dioxide (CO ₂). Powder.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards	Closed containers may build up pressure at elevated temperatures.
Hazardous combustion products	Thermal decomposition or combustion products may include the following substances: Carbon dioxide (CO ₂). Carbon monoxide (CO).

5.3. Advice for firefighters

Protective actions during firefighting	Avoid breathing fire gases or vapours.
Special protective equipment for firefighters	Wear full protective clothing

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Personal precautions	Avoid inhalation of vapours and contact with skin and eyes. Provide adequate ventilation. No smoking, sparks, flames or other sources of ignition near spillage.
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6.2. Environmental precautions

Environmental precautions	Do not discharge into drains or watercourses or onto the ground.
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6.3. Methods and material for containment and cleaning up

Methods for cleaning up	Contain spillage with sand, earth or other suitable non-combustible material. Collect and place in suitable waste disposal containers and seal securely.
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6.4. Reference to other sections

Reference to other sections	For waste disposal, see Section 13.
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SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Usage precautions	Avoid contact with skin and eyes. Avoid inhalation of vapours and spray/mists. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Static electricity and formation of sparks must be prevented. Provide adequate ventilation.
Advice on general occupational hygiene	Good personal hygiene procedures should be implemented.

7.2. Conditions for safe storage, including any incompatibilities

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**Storage precautions**

Keep container tightly closed, in a cool, well ventilated place. Only store in correctly labelled containers. Keep containers upright.

7.3. Specific end use(s)**SECTION 8: Exposure controls/Personal protection****8.1. Control parameters****Geraniol (CAS: 106-24-1)**

DNEL	Workers - Inhalation; Long term systemic effects: 161.6 mg/m ³ Workers - Dermal; Long term systemic effects: 12.5 bw/day, mg/kg General population - Inhalation; Long term systemic effects: 47.8 mg/m ³ General population - Dermal; Long term systemic effects: 7.5 bw/day, mg/kg General population - Oral; Long term systemic effects: 13.75 bw/day, mg/kg
PNEC	- Fresh water; Short term 0.011 mg/l - Fresh water, Intermittent release; 0.108 mg/l - marine water; Short term 0.001 mg/l - STP; Short term 0.7 mg/l - Sediment (Freshwater); Short term 0.115 mg/kg - Sediment (Marinewater); Short term 0.011 mg/kg - Soil; Short term 0.017 mg/kg

Citronellol (CAS: 106-22-9)

DNEL	Workers - Inhalation; Long term systemic effects: 161.6 mg/m ³ Workers - Inhalation; Long term local effects: 10 mg/m ³ Workers - Inhalation; Short term local effects: 10 mg/m ³ Workers - Dermal; Long term systemic effects: 327.4 mg/kg, bw/day Workers - Dermal; Short term local effects: 2.950 mg/cm ² General population - Inhalation; Long term systemic effects: 47.8 mg/m ³ General population - Inhalation; Long term local effects: 10 mg/m ³ General population - Inhalation; Short term local effects: 10 mg/m ³ General population - Dermal; Long term systemic effects: 196.4 bw/day, mg/kg General population - Dermal; Short term local effects: 2.950 mg/cm ² General population - Oral; Long term systemic effects: 13.8 mg/kg, bw/day
PNEC	- Fresh water; Short term 0.002 mg/l - Intermittent release, Fresh water; Short term 0.024 mg/l - marine water; Short term 0 mg/l - STP; Short term 580 mg/l - Sediment (Freshwater); Short term 0.026 mg/kg - Sediment (Marinewater); Short term 0.003 mg/kg - Soil; Short term 0.004 mg/kg

(R)-p-mentha-1,8-diene (CAS: 5989-27-5)

DNEL	Workers - Inhalation; Long term systemic effects: 33.3 mg/m ³ General population - Oral; Long term systemic effects: 4.76 mg/kg
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CITRONELLA JAVA OIL

- PNEC**
- STP; 1.8 mg/l
 - Soil; 0.262 mg/kg
 - Fresh water; 0.0054 mg/l
 - marine water; 0.00054 mg/l
 - Sediment (Freshwater); 1.32 mg/kg
 - Sediment (Marinewater); 0.13 mg/kg

Geranyl Acetate (CAS: 105-87-3)

- DNEL**
- Workers - Inhalation; Long term systemic effects: 62.59 mg/m³
 - Workers - Dermal; Long term systemic effects: 35.5 mg/kg, bw/day
 - General population - Inhalation; Long term systemic effects: 15.4 mg/m³
 - General population - Dermal; Long term systemic effects: 17.75 mg/kg, bw/day
 - General population - Oral; Long term systemic effects: 8.9 mg/kg, bw/day

- PNEC**
- Fresh water; Short term 3.72 mg/l
 - Intermittent release, Fresh water; 37.2 mg/l
 - marine water; Short term 0.372 mg/l
 - STP; Short term 8 mg/l
 - Sediment (Freshwater); Short term 0.442 mg/kg
 - Sediment (Marinewater); Short term 0.044 mg/kg
 - Soil; Short term 0.086 mg/kg

Citronellyl Acetate (CAS: 150-84-5)

- DNEL**
- Workers - Inhalation; Long term systemic effects: 17 mg/m³
 - Workers - Dermal; Long term systemic effects: 4.8 bw/day, mg/kg
 - General population - Inhalation; Long term systemic effects: 4.2 mg/m³
 - General population - Dermal; Long term systemic effects: 2.4 bw/day, mg/kg
 - General population - Oral; Long term systemic effects: 2.4 bw/day, mg/kg

- PNEC**
- Fresh water; Short term 0.003 mg/l
 - Intermittent release, Fresh water; 0.035 mg/l
 - marine water; Short term 0 mg/l
 - STP; Short term 10 mg/l
 - Sediment (Freshwater); Short term 0.851 mg/kg
 - Sediment (Marinewater); Short term 0.085 mg/kg
 - Soil; Short term 0.168 mg/kg

Eugenol (CAS: 97-53-0)

- DNEL**
- Workers - Inhalation; Long term systemic effects: 21.2 mg/m³
 - Workers - Dermal; Long term systemic effects: 6 bw/day, mg/kg
 - General population - Inhalation; Long term systemic effects: 5.22 mg/m³
 - General population - Dermal; Long term systemic effects: 3 mg/kg, bw/day
 - General population - Oral; Long term systemic effects: 3 bw/day, mg/kg

- PNEC**
- Fresh water; Short term 1.13 mg/l
 - Intermittent release, Fresh water; 11.3 mg/l
 - marine water; Short term 0.113 mg/l
 - Sediment (Freshwater); Short term 0.081 mg/kg
 - Sediment (Marinewater); Short term 0.008 mg/kg
 - Soil; Short term 0.015 mg/kg

Linalool (CAS: 78-70-6)

CITRONELLA JAVA OIL

DNEL

Workers - Dermal; Short term systemic effects: 5 mg/kg
 Workers - Inhalation; Short term systemic effects: 16.5 mg/m³
 Workers - Dermal; Long term systemic effects: 2.5 mg/kg
 Workers - Inhalation; Long term systemic effects: 2.8 mg/m³
 General population - Oral; Short term systemic effects: 1.5 mg/kg
 General population - Dermal; Short term systemic effects: 2.5 mg/kg
 General population - Inhalation; Short term systemic effects: 4.1 mg/m³
 General population - Oral; Long term systemic effects: 0.2 mg/kg
 General population - Dermal; Long term systemic effects: 1.25 mg/kg
 General population - Inhalation; Long term systemic effects: 0.7 mg/m³
 - ; :

PNEC

- STP; Short term 10 mg/l
- Soil; Short term 0.327 mg/kg
- Intermittent release; Short term 2 mg/l
- Fresh water; Short term 0.2 mg/l
- marine water; Short term 0.02 mg/l
- Sediment (Freshwater); Short term 2.22 mg/kg
- Sediment (Marinewater); Short term 0.222 mg/kg

Decanal (CAS: 112-31-2)

DNEL

Workers - Inhalation; Long term systemic effects: 24.9 mg/m³
 Workers - Dermal; Long term systemic effects: 7 bw/day, mg/kg
 General population - Inhalation; Long term systemic effects: 6.1 mg/m³
 General population - Dermal; Long term systemic effects: 3.5 mg/kg, bw/day
 General population - Oral; Long term systemic effects: 3.5 bw/day, mg/kg

PNEC

- Fresh water; Short term 1.17 mg/l
- Fresh water, Intermittent release; 11.7 mg/l
- marine water; Short term 0.117 mg/l
- STP; Short term 3.16 mg/l
- Sediment (Freshwater); Short term 0.097 mg/kg
- Sediment (Marinewater); Short term 0.01 mg/kg
- Soil; Short term 0.019 mg/kg

Terpineol (alpha&beta&gamma) (CAS: 8000-41-7)

DNEL

Workers - Inhalation; Long term systemic effects: 44.8 mg/m³
 Workers - Dermal; Long term systemic effects: 6.35 bw/day, mg/kg
 General population - Inhalation; Long term systemic effects: 7.96 mg/m³
 General population - Dermal; Long term systemic effects: 2.29 mg/kg, bw/day
 General population - Oral; Long term systemic effects: 0.42 bw/day, mg/kg

PNEC

- Fresh water; Short term 12 mg/l
- Fresh water, Intermittent release; mg/l
- marine water; Short term 1.2 mg/l
- STP; Short term 2.57 mg/l
- Sediment (Freshwater); Short term 0.263 mg/kg
- Sediment (Marinewater); Short term 0.026 mg/kg
- Soil; Short term 0.045 mg/kg

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

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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

a terpinolene (CAS: 586-62-9)

DNEL Workers - Inhalation; Long term systemic effects: 3.6 mg/m³
 Workers - Dermal; Long term systemic effects: 0.52 bw/day, mg/kg
 General population - Inhalation; Long term systemic effects: 0.9 mg/m³
 General population - Dermal; Long term systemic effects: 0.26 bw/day, mg/kg
 General population - Oral; Long term systemic effects: 0.26 mg/kg, bw/day

PNEC

- Fresh water; Short term 0.634 mg/l
- Fresh water, Intermittent release; Short term 0.634 mg/l
- marine water; Short term 0.063 mg/l
- STP; Short term 0.2 mg/l
- Sediment (Freshwater); Short term 14.7 mg/kg
- Sediment (Marinewater); Short term 14.7 mg/kg
- Soil; Short term 29.1 mg/kg

Alpha Pinene (CAS: 80-56-8)

DNEL Workers - Inhalation; Long term systemic effects: 3.8 mg/m³
 Workers - Dermal; Long term systemic effects: 0.54 bw/day, mg/kg
 General population - Inhalation; Long term systemic effects: 0.67 mg/m³
 General population - Dermal; Long term systemic effects: 0.19 mg/kg, bw/day
 General population - Oral; Long term systemic effects: 0.19 mg/kg, bw/day

PNEC

- Fresh water; Short term 0.606 mg/l
- Intermittent release, Fresh water; 3.03 mg/l
- marine water; Short term 0.061 mg/l
- marine water, Intermittent release; 0.303 mg/l
- STP; Short term 0.2 mg/l
- Sediment (Freshwater); Short term 157 mg/kg
- Sediment (Marinewater); Short term 15.7 mg/kg
- Soil; Short term 31.7 mg/kg

Camphene (CAS: 79-92-5)

CITRONELLA JAVA OIL

**DNEL**

Workers - Inhalation; Long term systemic effects: 110.19 mg/m³
 Workers - Inhalation; Short term systemic effects: 110.19 mg/m³
 Workers - Dermal; Long term systemic effects: 0.21 bw/day, mg/kg
 Workers - Dermal; Short term systemic effects: 1.25 bw/day, mg/kg
 General population - Inhalation; Long term systemic effects: 54.3 mg/m³
 General population - Inhalation; Short term systemic effects: 54.3 mg/m³
 General population - Dermal; Long term systemic effects: 0.1 bw/day, mg/kg
 General population - Dermal; Short term systemic effects: 0.625 bw/day, mg/kg
 General population - Oral; Long term systemic effects: 0.1 bw/day, mg/kg
 General population - Oral; Short term systemic effects: 0.625 mg/kg, bw/day

PNEC

- Fresh water; Short term 0.001 mg/l
 - Fresh water, Intermittent release; 0.001 mg/l
 - marine water; Short term 0 mg/l
 - STP; Short term 10 mg/l
 - Sediment (Freshwater); Short term 0.026 mg/kg
 - Sediment (Marinewater); Short term 0.003 mg/kg
 - Soil; Short term 0.021 mg/kg

8.2. Exposure controls**Protective equipment**

Appropriate engineering controls

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Eye/face protection

Approved safety goggles.

Hand protection

Chemical resistant gloves (PVC)

Other skin and body protection

Wear apron or protective clothing in case of contact.

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.
Odour	Characteristic.
Melting point	<-20°C
Initial boiling point and range	92°C @ 1013 hPa
Flash point	70-90°C
Vapour pressure	22.14 Pa @ 25°C
Relative density	0.850 - 0.950 @ 20°C

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Solubility(ies)	0.05 - 1767 mg/l water @ 25°C
Partition coefficient	log Kow: 2.73 - 7.04
Auto-ignition temperature	240°C

9.2. Other information

Refractive index	1.450 - 1.490 @ 20°C
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Hydrocarbon Content**SECTION 10: Stability and reactivity****10.1. Reactivity**

Reactivity	Not known.
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10.2. Chemical stability

Stability	Stable under the prescribed storage conditions.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	No data available.
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10.4. Conditions to avoid

Conditions to avoid	Avoid heat, flames and other sources of ignition.
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10.5. Incompatible materials

Materials to avoid	Strong oxidising agents.
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10.6. Hazardous decomposition products

Hazardous decomposition products	No data available.
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SECTION 11: Toxicological information**11.1. Information on toxicological effects****Acute toxicity - oral**

ATE oral (mg/kg)	500.0
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SECTION 12: Ecological information**12.1. Toxicity****Acute aquatic toxicity**

Acute toxicity - fish	LL ₅₀ , 96 hours: 7.5 mg/l, Oncorhynchus mykiss (Rainbow trout)
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Acute toxicity - aquatic invertebrates	EL ₅₀ , 48 hours: 6.0 mg/l, Daphnia magna
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Acute toxicity - aquatic plants	ErL ₅₀ , 72 hours: 10 mg/l, Pseudokirchneriella subcapitata
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Acute toxicity - microorganisms	Not known.
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Acute toxicity - terrestrial	Not known.
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12.2. Persistence and degradability

Persistence and degradability	The product is readily biodegradable.
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12.3. Bioaccumulative potential

CITRONELLA JAVA OIL



Partition coefficient log Kow: 2.73 - 7.04

12.4. Mobility in soil

Mobility No data available.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects**SECTION 13: Disposal considerations****13.1. Waste treatment methods**

Disposal methods Dispose of waste product or used containers in accordance with local regulations

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

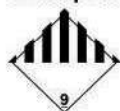
ADR/RID classification code M6

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

CITRONELLA JAVA OIL



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

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**

No chemical safety assessment has been carried out.

Inventories**EU - EINECS/ELINCS**
Complies**Canada - DSL/NDL**
DSL**US - TSCA**
Complies**US - TSCA 12(b) Export Notification**
Not listed.**Australia - AICS**
Complies**Japan - ENCS**
Complies**Korea - KECI**
Complies

CITRONELLA JAVA OIL**China - IECSC**

Complies

Philippines – PICCS

Complies

New Zealand - NZIOC

Complies

Taiwan - NECI

Complies

SECTION 16: Other information

Revision date	18/06/2019
Revision	6
Supersedes date	18/06/2019
SDS number	4714
Hazard statements in full	H226 Flammable liquid and vapour. H302 Harmful if swallowed. 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. 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. H412 Harmful to aquatic life with long lasting effects. H413 May cause long lasting harmful effects to aquatic life.

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	CITRONELLA JAVA OIL	
Product Code	OECITR	
INCI Name	Cymbopogon	
Country of Origin	China / Indonesia	
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.	
Irradiation Statement	We hereby confirm from information received from our supplier that this product has not undergone any treatments at any stage for preservation, sterilisation (e.g irradiation, fumigation etc.)	
Kosher Certified	Yes	
Halal Certified	We hereby declare, 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 modified organisms.	
BSE (Bovine Spongiform Encephalopathy) and TSE (Transmissible Spongiform Encephalopathy) Declaration	We hereby declare, from information received from our supplier, that this product is entirely free from BSE and TSE. This product does not contain and is not produced from any animal origin.	
Manufacturing Process	Steam distillation of the freshly cut or partially dried grasses of Cymbopogon Winterianus.	
Identification	CAS No: 91771-61-8	EINECS No: 294-954-7
	Alternative Cas: 8000-29-1	FEMA No: 2308
	CoE: 39	FDA No: 182.20
PHYSICAL AND CHEMICAL CHARACTERISTIC		
Appearance	Liquid	
Colour	Pale yellow	
Odour	Characteristic	
Initial Boiling Point and range	220 - 225°C	
Flash Point	70-90°C	
Vapour Pressure @ 25°C	0.8 mm Hg	
Relative Density @ 20°C	0.850 - 0.950	
Refractive Index @ 20°C	1.450 - 1.490	
FRAGRANCE ALLERGENS		
Citral (5392-40-5) <2%	Citronellol (106-22-9) Ca 12.74%	Limonene (5989-27-5) Ca 3.76%
Eugenol (97-53-0) Ca 1.05%	Farnesol (4602-84-0) <1%	Geraniol (106-24-1) Ca 21%
Linalool (78-70-6) Ca 1%		
FOOD ALLERGENS		
NONE		
IFRA		
Citral (5392-40-5) <2%	Geraniol (106-24-1) Ca 21%	Eugenol (97-53-0) Ca 1.05%
Farnesol (4602-84-0) <1%	Citronellol (106-22-9) Ca 12.74%	
STORAGE AND SHELF LIFE		
Storage	Store in tightly closed container with minimum headspace in a cool, dark and dry place.	
Shelf Life	36 months unopened and stored as above.	

DISCLAIMER: 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 users responsibility to satisfy himself as to the suitability of such information for his own particular use. Where MADAR Corporation make a declaration that allergenic material are not present in any product, this statement is made assuming reasonable levels of detection. It is impossible to guarantee the "absolute absence" of any material. It is the ultimate responsibility of the customer to ensure the safety of the intended final product containing this material, by carrying out additional tests if necessary.

Issue no: 3



Vegan and Vegetarian Statement

IDENTIFICATION

Product: CITRONELLA JAVA OIL

Cas No: 91771-61-8

EINECS No: 294-954-7

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.