

**01. IDENTIFICATION OF THE SUBSTANCE AND THE COMPANY UNDERTAKING****1.1 Product Identifier**

1.1 Product Identifier	Palmarosa Oil.				
Biological Definition	Cymbopogon Martini Oil is the volatile oil expressed from the herb palmarosa, Cymbopogon martini, Gramineae.				
INCI Name	Cymbopogon Martini Oil				
Synonyms Trade Names	-				
CAS Number	84649-81-0	EC Number	283-461-2	EINECS No.	283-461-2

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

No additional data available.

1.3 Details of the supplier of the safety data sheet

Calmer Solutions Limited - Hadresham, Woolborough Lane, Outwood, Surrey, England RH1 5QR - Reg No 4992013

1.4 Emergency Telephone Number

In case of a medical emergency following exposure to a chemical, call NHS Direct in England or Wales 0845 46 47 or NHS 24 in Scotland 08454 24 24 (UK Only)

02. HAZARDS IDENTIFICATION**2.1 Classification of the substance or mixture**

The full text for all hazard statements are displayed in section 16.

Classification (EC 1272 / 2008)

Skin Irrit 2 – H315 Skin Sens. 1 – H317 Eye Dam. 1 - H318 Aquatic Chronic 3 – H412

GHS07

GHS05

None

None

None



Signal Word

Danger

Contains

Citral, Geraniol, Geranyl Acetate, Limonene, Linalool,

Hazard Statements

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H412 Harmful to aquatic life with long lasting effects.

Precautionary Statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.
P262 Do not get in eyes, on skin, or on clothing.
P305 IF IN EYES:
P351 Rinse cautiously with water for several minutes.
P338 Remove contact lenses, if present and easy to do. Continue rinsing.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash... thoroughly after handling.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P302 IF ON SKIN:
P352 Wash with plenty of soap and water.
P310 Immediately call a POISON CENTER or doctor/physician.
P321 Specific treatment (see... on this label).
P333 If skin irritation or rash occurs:
P313 Get medical advice/attention.
P362 Take off contaminated clothing and wash before reuse.
P363 Wash contaminated clothing before reuse.
P501 Dispose of contents/container to...

Supplementary Precautionary Statements

None Identified

2.3 Other Hazards

PBT or PvB according to Annex XIII	No additional data available.
Adverse physio-chemical properties	No additional data available.
Adverse effects on human health	No additional data available.

03. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

70 - 80 % Geranoil	CAS No: 106-24-1	EC No: 203-377-1
Classification (EC 1272/2008): SCI 2-EDI, 1-SS 1,;H315 - H3170H319		
0 - 15 % Geranyl Acetate	CAS No: 105-87-3	EC No: 203-341-5
Classification (EC 1272/2008): Aquatic Chronic 2 - H411		
0 - 4 % Linalool	CAS No: 78-70-6	EC No: 201-134-4
Classification (EC 1272/2008): Acute Tox. 5 _ H303, Skin Irrit. 2 H315, Aquatic Acute 3 - H402		
0 - 3 % Beta Caryophyllene	CAS No: 87-44-5	EC No: 201-746-1
Classification (EC 1272/2008): Asp. Toxic 1 - H304		

0 - 2 % Citral

CAS No: 5392-40-5 EC No: 226-394-6

Classification (EC 1272/2008): Skin Irrit. 2 - H315, Skin Sens. 1 - H317

0 - 1 % Limonene

CAS No: 5989-27-5 EC No: 227-813-5

Classification (EC 1272/2008): Flam. Liq. 3 - H226, Skin Irrit. 2 - H315, Skin Sens. 1 - H317, Asp. Tox. 1 - H304, Aquatic Acute 1 - H400, Aquatic Chronic 1 - H410

0 - 1 % Farnesol

CAS No: 4602-84-0 EC No: 225-004-1

Classification (EC 1272/2008): Skin Irrit. 2 - H315, Eye Irrit. 2 - H319, Skin Sens. 1 - H317

04. FIRST AID MEASURES

4.1 Description of first aid measures

41 Inhalation:	Seek emergency medical advice immediately. Following inhalation exposure move individual to fresh air. Headache, rhinorrhea, cough shortness of breath, chest pains, bronchial spasm may develop after exposure and result in delayed effects.
41 Ingestion:	Ask immediately medical assistance - mouth washing with water and do not provoke vomiting.
41 Eye:	Abundant eye-wash for 15 minutes with pure water, make sure you have eliminated the contamination, in case of complaints seek medical attention.
41 Skin:	Remove contaminated clothing and wash with water and soap the contaminated part – make sure you have eliminated the contamination - in case of complaints seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms: Inhalation: can cause slight headache, rhinorrhea, cough shortness of breath, chest pains, bronchial spasm Eye contact: can cause bloodshot eyes Skin contact: can cause slight skin rash. Ingestion: Nausea, vomiting and diarrhoea can result from ingestion.

4.3 Indication of any immediate medical attention and special treatment needed

Inhalation: Monitor for signs of respiratory distress. Eye contact: Monitor for irritation, pain or swelling. Skin contact: Monitor signs of skin sensitisation. Ingestion: Monitor signs of aspiration particularly following loss of consciousness.

05. FIRE FIGHTING MEASURES

5.1 Extinguishing Media

Carbon dioxide, Chemical Powder or Foam. Do not use a direct stream of water.

5.2 Special hazards arising from the product

In case of fire Carbon Monoxide and other unidentified organic compounds may be released.

5.3 Advice for firefighters

In case of insufficient ventilation use suitable respiratory equipment. Wear chemical protective clothing.

06. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this safety data sheet. If outside do not approach from downwind outside keep by standers upwind and away from danger point. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Turn leaking containers leak side up to prevent the escape of liquid.

6.2 Environmental Precautions

Do not discharge into drains, water courses or onto the ground. Contain spillages with sand, earth or any suitable adsorbent material.

6.3 Methods and material for containment and clearing up

Soak up spillage with sand or other inert absorbent material such as earth or vermiculite, transfer used

6.4 Reference to other sections

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07. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid spilling, skin and eye contact. Ensure adequate ventilation of the working area. Adopt best manual handling considerations when handling, carrying and dispensing. Keep away from heat, sparks and open flame.

7.2 Conditions for safe storage, including and incompatibilities

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

7.3 Specific end use(s)

No additional data available.

08. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control Parameters

No additional data available.

8.2 Exposure controls

Protective Equipment

Goggles

Gloves

Respirator

Overalls

None



Process Conditions:

Provide eyewash station.

Engineering Measures:

Provide adequate ventilation. Observe Occupational Exposure Limits and m

Respiratory Equipment:

No specific recommendation made, but respiratory protection may still be required under exceptional circumstances when excessive air contamination exists.

Hand Protection:

Use suitable protective gloves if risk of skin contact.

Eye Protection:

If risk of splashing, wear safety goggles or face shield.

Other Protection:

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene Measures:

DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly with soap & water if skin becomes contaminated. Promptly remove any clothing

	that becomes contaminated. When using, do not eat, drink or smoke.
Personal Protection:	Use personal protection according to Directive 89/686/EEC.
Skin Protection	Wear apron or protective clothing in case of splashes.
Environmental Exposure Controls:	Avoid discharging into drainage water. Only eliminate by authorised companies.

09. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:	Mobile liquid.
Colour:	Light yellow to yellow brown.
Flash Point:	64 - 100°C (94°C Typical)
Odour:	Characteristic, grassy-floral.
Relative Density:	0.879 – 0.892@ 20°C
Refractive:	1.470 – 1.479 @ 20°C
Melting Point:	No additional data available.
Boiling:	215°C (lit.)
Vapour:	No additional data available.
Solubility:	Insoluble in water.
Auto Ignition:	No additional data available.

9.2 Other Information

No additional data available.

10. STABILITY AND REACTIVITY

10.1 Reactivity

Substance not reactive with water - substance not reactive if used according to storage & handling conditions & identified

10.2 Chemical Stability

Substance stable if used according to storage & handling conditions & identified uses (see subsection 1.2).Susceptible to ox

10.3 Possible hazardous reactions

Oxidation, reduction and hydrolytic reactions likely to increase skin / eye / respiratory irritation /sensitisation. May react vig

10.4 Conditions to avoid

Conditions leading to thermal decomposition either by contact with strong oxidising or reducing substances or by combust

10.5 Incompatible materials

Highly oxidizing agents.

10.6 Hazardous Decomposition Products

Acrid smoke and irritating fumes released on combustion. In case of combustion: carbon monoxide (CO),carbon dioxide (CO

11. TOXOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute Toxicity: LD50: oral rat >5000mg/kgLD50 dermal rabbit >5000mg/kg

Respiratory or skin sensitisation:	Classified for this effect based on data available for geraniol.
Skin corrosion/irritation:	Ref : Food & Cosmetics Toxicology 12, 947 1874
Serious Eye damage/irritation:	Mean value of >2.3 0 <4.0 for erythema / eschar or for oedema in at least 2 of 3 tested animals from grading at 24, 48 and 72 hours after patch removal or, if reactions are delayed, from grades on 3 consecutive days after the onset of skin reactions.
Germ Cell Mutagenicity:	Can lead to sensitisation by skin contact.
Carcinogenicity:	No additional data available.
Reproductive toxicity:	No additional data available.
STOT Single exposure:	No additional data available.
STOT Repeated exposure:	No additional data available.
Photo-toxicity:	No additional data available.
Aspiration hazard:	No additional data available.
Other Information:	Hydrocarbon content (monoterpenes) <10% w/w no aspiration hazard by

12. ECOLOGICAL INFORMATION

12.1 Toxicity				
Data not available for the complete essential oil. Ecotoxicity for major components (86%) Ecotoxicity for major components (86%)				
Component	LC50(96Hr) Fish Mg/l	EC50(48Hr) Daphnia Mg/l	IC50(72Hr) Algae	Geraniol
3.2	8.98 N/Ad-Limonene	0.7	0.4 N/Alinalool	
27.8	59 88.3 Farnesol	1.4 – 2.2	1.9 – 2.5 N/A	
12.2 Persistence Degradability				
Geraniol 53% of theoretical BOD moderate potential. Linalool 90% of theoretical BOD high potential.				
12.3 Bioaccumulation Potential				
No additional data available.				
12.4 Mobility in soil				
Geraniol Koc 2060 expected to have low mobility. Linalool Koc 76 expected to have high mobility. Geranyl Acetate Koc 3700 expected to have slight mobility				
12.5 Results of PBT and vPvB Assessment				
No additional data available.				
12.6 Other adverse effects				
No additional data available.				

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
The containers used for this product must completely empty before disposal. Dispose product and/or contaminated packaging in accordance with federal, state and local environmental control regulations -disposal through the waste water is illegal.

14. TRANSPORT INFORMATION

14.1 UN number

Road:	Not regulated.
Sea:	Not regulated.
Air:	Not regulated.

14.2 UN Proper shipping name

None.

14.3 Transport hazard class(es)

None.

None. None. None.

14.4 Packing group

None.

14.5 Environmental Hazards

None.

None. None. None.

14.6 Special precautions for users

Not applicable.

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

None.

15. REGULATORY INFORMATION

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

Statutory Instruments
The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).
Guidance Notes
Workplace Exposure Limits EH40. CHIP for everyone HSG(108).
EU Legislation
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), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

15.2 Chemical safety assessment

No additional information available.

16. OTHER INFORMATION

Hazard or precaution	H318 Causes serious eye damage. H315 Causes skin irritation.
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H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H303 May be harmful if swallowed.
H317 May cause an allergic skin reaction.
H351 Suspected of causing cancer.
H341 Suspected of causing genetic defects.
H411 Toxic to aquatic life with long lasting effects.
H401 Toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Other Information:: H412 Harmful to aquatic life with long lasting effects.

Revision Date: 4/1/2019

Reason: New SDS

Revision Number: 2

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 user's responsibility to satisfy themselves as to the suitability of such information for his own particular use.