

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

1.1 Product Identifier	Citronella Oil				
Biological Definition	The volatile oil obtained by the steam distillation of the semi-dried aerial parts of <i>Cymbopogon winterianus</i> Jowitt.				
INCI Name	Cymbopogon Winterianus Oil				
Synonyms Trade Names	-				
CAS Number	91771-61-8	EC Number	294-954-7	EINECS No.	294-954-7

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 is displayed in Section 16. ENVIRONMENT The product contains a substance which is harmful to aquatic organisms and which may cause long term adverse effects in the aquatic environment. HUMAN HEALTH May cause serious

Classification (EC 1272 / 2008)

Physical and Chemical Hazards: Not classified. Human health Asp: Skin Irrit. 2 - H315; Eye Dam. 1 - H318; Skin Sens. 1 - H317 Environment: Aquatic Acute 2 - H401; Aquatic Chronic 2 - H411

GHS05

GHS07

GHS09

None

None



Signal Word

Danger

Contains

Citronellal, Citronellol, Eugenol, Granial, Geranoil, Limonene,

Hazard Statements

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H401 Toxic to aquatic life.
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.
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.

Supplementary Precautionary Statements

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.
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).
P332 If skin irritation occurs:
P313 Get medical advice/attention.
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.
P391 Collect spillage.
P501 Dispose of contents/container to...

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

30 - 60 % Citronellal CAS No: 106-23-0 EC No: 203-376-6

Classification (EC 1272/2008): Skin Irrit. 2 - H315, Skin Sens. 1 - H317, Aquatic Chronic 2 - H411

20 - 35 % Citronellol CAS No: 106-22-9 EC No: 203-375-0

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

1 - 5 % Citronellyl Acetate	CAS No: 150-84-5	EC No: 205-775-0
Classification (EC 1272/2008): Skin Irrit. 2 - H315, Aquatic Chronic 2 - H411		
1 - 5 % Eugenol	CAS No: 97-53-0	EC No: 202-589-1
Classification (EC 1272/2008): Acute Tox. 4 - H302, Carc. 2 - H351, Muta. 2 - H341		
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		
0 - 0.7 % Geraniol	CAS No: 141-27-5	EC No: 205-476-5
Classification (EC 1272/2008): Skin Irrit. 2 - H315, Skin Sens. 1 - H317		
10 - 30 % Geranoil	CAS No: 106-24-1	EC No: 203-377-1
Classification (EC 1272/2008): SCI 2-EDI, 1-SS 1,;H315 - H317H319		
1 - 5 % Geranyl Acetate	CAS No: 105-87-3	EC No: 203-341-5
Classification (EC 1272/2008): Aquatic Chronic 2 - H411		
1 - 10 % 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		

04. FIRST AID MEASURES

4.1 Description of first aid measures

41 Inhalation:	Move the exposed person to fresh air at once. Rinse nose and mouth with water. Get medical attention if any discomfort continues.
41 Ingestion:	Ingestion may cause nausea and vomiting. Seek medical attention if irritation or symptoms persist. Do not induce vomiting.
41 Eye:	Remove victim immediately from source of exposure. Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention.
41 Skin:	Remove affected person from source of contamination. Remove contaminated clothing. Wash the skin immediately with soap and water. Get medical attention if any discomfort continues.

4.2 Most important symptoms and effects, both acute and delayed

No additional data available.

4.3 Indication of any immediate medical attention and special treatment needed

No additional data available.

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. Handle the product using protective gloves resistant to the chemicals exposed. Avoid contact with skin and inhalation of its vapours or smoke. Maintain adequate ventilation in the working area after spilling.

6.2 Environmental Precautions

Do not discharge into drains, water courses or onto the ground.

6.3 Methods and material for containment and clearing up

Absorb with inert, non-combustible, inorganic absorbant material, sweep up and remove to an approved disposal container. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking.

6.4 Reference to other sections

Wear protective clothing as described in Section 8 of this safety data sheet.

07. HANDLING AND STORAGE

7.1 Precautions for safe handling

Observe good chemical hygiene practices. Do not eat, drink or smoke when using the product.

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. Protect from light, including direct sunrays. Keep away from heat, sparks and open flame.

7.3 Specific end use(s)

No additional data available.

08. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control Parameters

No additional information available.

8.2 Exposure controls

Protective Equipment

Goggles

Gloves

None

None

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:	Clear liquid
Colour:	Pale yellow to brownish yellow.
Flash Point:	978
Odour:	Characteristic.
Relative Density:	0.850 - 0.950 @ 20°C
Refractive:	1.450 - 1.490@ 20°C
Melting Point:	No additional data available.
Boiling:	220.0 - 225.0
Vapour:	0.8mm Hg 25c
Solubility:	1:2 on Ethanol 80c
Auto Ignition:	No additional data available.

9.2 Other Information

No additional data available.

10. STABILITY AND REACTIVITY

10.1 Reactivity

We have no data regarding ecotoxicity, but it must be considered that this product may be dangerous for the environment.

10.2 Chemical Stability

No additional data available.

10.3 Possible hazardous reactions

No additional data available.

10.4 Conditions to avoid

No additional data available.

10.5 Incompatible materials

No additional data available.

10.6 Hazardous Decomposition Products

Do not allow product to enter streams, sewers or other waterways.

11. TOXOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute Toxicity:	Toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment.
Respiratory or skin sensitisation:	In high concentrations, vapours may irritate throat and respiratory system and cause coughing.
Skin corrosion/irritation:	May cause discomfort if swallowed. May cause sensitisation by skin contact.
Serious Eye damage/irritation:	Spray and vapour in the eyes may cause irritation and smarting.
Germ Cell Mutagenicity:	No additional data available.
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:	No additional data available.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

We have no data regarding ecotoxicity, but it must be considered that this product may be dangerous for the environment.

12.2 Persistence Degradability

No additional data available.

12.3 Bioaccumulation Potential

No additional data available.

12.4 Mobility in soil

No additional data available.

12.5 Results of PBT and vPvB Assessment

No additional data available.

12.6 Other adverse effects

Do not allow product to enter streams, sewers or other waterways.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Dispose of in compliance with all local and national regulations.

14. TRANSPORT INFORMATION

14.1 UN number

Road:	3082
Sea:	3082
Air:	3082

14.2 UN Proper shipping name

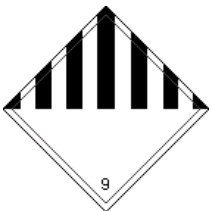
ENVIRONMENTAL

14.3 Transport hazard class(es)

ADR/RID/ADN Class: 9 Miscellaneous dangerous substances and articles. IMDG Class: 9ICAO

Class/Division: 9Transport Labels

Cl. 9_140 ENVIRONMENTAL ENVIRONMENTAL



14.4 Packing group

ADR/RID/ADN Packing group: III IMDG Packing group: III ICAO Packing group: III

14.5 Environmental Hazards

Environmentally Hazardous Substance/Marine Pollutant

Umwelt_140 ENVIRONMENTAL ENVIRONMENTAL



14.6 Special precautions for users

EMS F-A-S-F Emergency Action Code 3 Hazard No. (ADR) 90 Environmentally hazardous substance; miscellaneous dangerous substances. Tunnel Restriction Code (E)

14.7 Transport in bulk according to Annex II of MARLPOL73/78 and the IBC Code

No additional data available.

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. H319 Causes serious eye irritation. H315 Causes skin irritation. H226 Flammable liquid and vapour. H304 May be fatal if swallowed and enters airways. H317 May cause an allergic skin reaction. H411 Toxic to aquatic life with long lasting effects. H401 Toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H400 Very toxic to aquatic life.
Other Information::	None.
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.