




MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF SUBSTANCE/PREPARATION

1.1. Product Name					
Citronella Essential Oil					
1.2. INCI Name					
Cymbopogon Winterianus					
CAS No.	91771-61-8	EC No.	294-954-7	EINEC No.	294-954-7

2. HAZARD IDENTIFICATION

2.1. Classification of substance or mixture		
The full text for all hazard statements is displayed in section 16		
ENVIRONMENT:		
<ul style="list-style-type: none"> 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		
<ul style="list-style-type: none"> May cause serious eye damage and skin irritation 		
2.2. Classification (EC 1272/2008)		
Physical and chemical hazard	Not classified	
Human Health	H317	
	H318	
	H315	
Environment	H411	
	H401	
2.3. Label Elements		
Labels in accordance with (EC) No 1272/2008		
		
GHS09	GHS05	GHS09

Signal word	Danger
Contains	Citronellal, Citronellol, Eugenol, Geranial, Geraniol, Limonene
2.4. Hazardous 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
2.5. Precautionary Statements	
P273	Avoid release into the environment
P280	Wear protective gloves/eye protection/face protection
P262	Do not get in eyes, on skin, or on clothing
P305/P351/P338	If in eyes: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
2.6. Supplementary statements	
P264	Wash ... thoroughly after handling
P302/P352	IF ON SKIN - wash with plenty of soap and water
P310	Immediately call a POISON CENTER or Dr/Physician
P332/P313	If skin irritation occurs - get medical attention/advise
P333/P313	If skin irritation or rash occurs: get medical attention/advise
P362	Take off contaminated clothing and wash before reuse
P261	Avoid breathing dust, fumes, gas, mist and or vapours and sprays
P272	Contaminated work clothing should not be allowed out of the work area
P363	Wash contaminated clothing before reuse
P391	Collect spillage
P321	See label for specific treatment

P333/P313	If skin irritation or rash occurs, get medical advice or attention
P363	Wash contaminated clothing before use
P501	Dispose of contents/container to ...
2.7. Other hazards	
PBT or vPvB 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

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1. Ingredients			
NAME OF CONSTITUENT	CAS NO.	EC NO.	% COMPOSITION
Citronellal	106-23-0	203-376-6	30.0% - 60.0%
Citronellol	106-22-9	203-375-0	≤ 35.0%
Citronellyl Acetate	150-84-5	205-775-0	1% - 5%
Eugenol	97-53-0	202-589-1	1% - 5%
Farnesol	4602-84-0	225-004-1	≤ 1.0%
Geranial	141-27-5	205-476-5	≤ 0.7%
Geraniol Acetate	106-24-1	203-377-1	10.0% - 30.0%
Geranyl Acetate	105-87-3	203-341-5	1% - 5%
Limonene	5989-27-5	227-813-5	1.0% - 10.0%

4. FIRST AID MEASURES

4.1. Descriptions of first aid measures	
Inhalation	Remove from the exposed area to fresh air. Obtain medical advice immediately
Ingestion	Immediately call a POISON CENTRE or Dr/Physician
Skin contact	Remove/take off immediately all contaminated clothing. Rinse skin with water/shower
Eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

	Continue rinsing
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

5. **FIRE FIGHTING MEASURE**

5.1. Extinguishing media	
Suitable Extinguishing media	Co2, dry powder or foam. Spray at base of flames
5.2. Special hazards arising from the product	
	In case of fire, carbon monoxide or unidentified organic compounds may be liberated
5.3. Advice for firefighters	
	In case of insufficient ventilation, wear suitable respiratory equipment

6. **ACCIDENTAL RELEASE MEASURE**



6.1. Personal precautions, protection equipment and emergency procedure
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
Avoid disposing into drainage, sewer systems or in any natural environment. Keep away from the surface and groundwater. Prevent further spillage if safe
6.3. Methods and material for containment and cleaning up
Cover with an inert, inorganic, non-combustible absorbent material (e.g dry lime, sand, soda ash). Place in covered containers using non-sparking tools and transport outdoors. Avoid open flames or sources of ignition. Ventilate area and wash spill site after material is picked up. Dispose according to current laws and regulations

7. **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 any incompatibilities
Store in a tightly closed original container in a dry, well-ventilated and cool area. Keep in original container
7.3. Specific end use(s)
No additional data available

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters	
No additional data available	
8.2. Protective equipment	
 	
Process Conditions	Provide eye wash station
Engineering measures	Provide adequate ventilation and avoid static discharge in working area
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 and 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

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties	
Appearance	Clear Liquid
Colour	Pale Yellow to Brownish Yellow
Odour	Characteristic
Flash point	978
Relative density	0.850 - 0.950 @ 20°C
Refractive index	1.450 - 1.490 @ 20°C
Boiling point	220.0 - 225.0
Melting point	No additional data available
Vapour pressure	0.8mm Hg 25c
Solubility in water @ 20°C	1:2 on Ethanol 80c
Auto ignition temperature	No additional data available
9.2. Other information	
No additional data available	

10. STABILITY AND REACTIVITY

10.1. Reactivity
Stable under the recommended temperature, handling and storage conditions
10.2. Chemistry stability
Stable under the recommended handling and storage conditions
10.3. Possible hazardous reactions
No additional data available
10.4. Conditions to avoid
Avoid heat, sparks and open flames

10.5. Incompatible materials
Avoid contact with strong acids, alkalis and oxidising agents
10.6. Hazardous decomposition products
In case of fire, dangerous decomposition products can be generated, such as carbon monoxide and dioxide and nitrogen fume and oxides

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects	
Acute toxicity	Toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment
Skin irritation or corrosion	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
Respiratory or skin sensitisation	In high concentrations, vapours may irritate throat and respiratory system and cause coughing
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
Aspiration hazard	No additional data available
Photo-toxicity	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 and 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
Do not release into the environment.

14. TRANSPORT INFORMATION

14.1. UN numbers			
Road	3082		
Sea	3082		
Air	3082		
14.2. UN Proper shipping name			
ENVIRONMENTALLY HAZARDOUS SUBSTANCES LIQUID N.O.S.			
14.3. Transport hazard class(es)			
ADR/RID/ADN	Class 9	Miscellaneous dangerous substances and articles	TRANSPORT LABEL 
IMDG	Class 9	Miscellaneous dangerous substances and articles	
ICAO	Class 39	Miscellaneous dangerous substances and articles	

14.4. Packing group	
ADR/RID/ADN	III
IMDG	III
ICAO	III
14.5. Environmental hazards	
Environmentally hazardous substance/marine pollutant	
	
14.6. Special precaution for user	
EMS	F-A, S-F
Emergency code	3Z
Hazard No.	(ADR) 90 environmentally hazardous substance; miscellaneous dangerous substance
Tunnels Restriction Code	(E)

15. Safety, health and environmental regulation/legislation specific for the substance or mixture

Statutory instruments	The chemicals [Hazard information and packaging for supply regulation 2009 (SI 2009 NO 716)]
Guidance notes	Workplace exposure limit EH40. CHIP for everyone HSG (108)
EU Legislation	Regulation (EC) No 1907/2006 of the European Parliament and 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 Regulations (EC) No 1488/94 as well as Council Directive 79/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC, 2000/21/EC, including amendments
15.1. Chemical safety assessment	
No additional data available	

16. OTHER INFORMATION

16.1. Hazard and / or Precautionary Statements in Full	
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
16.2. Disclaimer	
<p>As the users' conditions of work are not known, the information contained in this Material Safety Data Sheet is accurate to the best of our knowledge and is based on the national community regulations.</p> <p>The product must not be employed for uses other than those specified without having previously obtained writing handling instructions. Users are responsible for taking all necessary to comply with the requirements of the law and local regulations. The information contained in this sheet should be regarded as the description of the safety requirements relating to our products and not as a guarantee of its properties.</p>	