





MATERIAL SAFETY DATA SHEET

01. IDENTIFICATION OF THE SUBSTANCE/PREPARATION & THE COMPANY/UNDERTAKING

1.1 Product Identifier			
Product Name	Citronella Essential Oil		
Biological Definition	Cymbopogon nardus Oil is the volatile oil obtained from Cymbopogon nardus grass		
INCI Name	Cymbopogon nardus oil		
Synonyms & Trade Names	Citronella Oil		
CAS-No	8000-29-1	EC No.	296-034-0
EINECS No.	294-954-7		
1.2 Relative identified uses of the substance or mixture and uses advised against			
Cosmetics and fragancing			
1.3 Details of the supplier of the safety data sheet			
NTM UK LTD, 69 Bethel Street, Norwich, Norfolk, United Kingdom NR2 1NR			
1.4 Emergency Tel. No.	+44(0)1603 610883		

02. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture			
The Full Text for all Hazard Statements is displayed in Section 16.			
Classification (EC 1272/2008)			
UN-GHS: FL 4, ATO 5(4100), ATD 5(4200), SCI 2, EDI 1,SS 1, EH A2,C2 EU-CLP: SCI 2, EDI 1, SS 1, EH A2C2			
2.2 Label Elements			
Label in accordance with (EC) No 1272/2008			
GHS07	GHS08	GHS09	GHS05
			
Signal Word	Danger		
Contains	Limonene, citronellal, linalool, geraniol, citronellol, geranyl acetate,		
Hazard Statements			
H315 Causes skin irritation H317 May cause an allergic skin reaction H318 Causes serious eye damage H411 Toxic to aquatic life with long-lasting effects			

Precautionary Statements	
P301/310 If swallowed immediately call a POISON CENTRE or doctor/physician P331 Do NOT induce vomiting	
P262 Do not get in eyes on skin or on clothing	
P280 Wear protective gloves/protective clothing/eye protection/face protection	
P273 Avoid release to the environment	
P391 Collect spillage	
P305/351/338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.	
Supplementary Precautionary Statements	
None	

2.3 Other Hazards	
PBT or vPvB according to Annex XIII	No additional data available.
Adverse physio-chemical properties	None
Adverse effects on human health	May cause sensitisation: avoid contact with skin and eyes

03. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances	
38% Citronellal ATO 5(2500); SCI 2; EDI 2A; SS 1; EH A2,C2	
22% Geraniol ATO 5(4200); SCI 2; EDI 1; SS 1; EH A2	
11% Citronellol ATO 5(3450);ATD 5(2650); SCI 2; SS 1; EH A2	
4% Geranyl acetate SCI 3; EH A2,C2	
4% Limonene SCI 2; SS 1; A1,C1	
1% Farnesol SCI 2; EDI 2A, SS1	
1% Linalool ATO 5(3000), EDI 2A, EHA 3, SCI 2	

04. FIRST AID MEASURES

4.1	Description of first aid measures
Inhalation	Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.
Ingestion	Wash mouth out with water and obtain medical advice immediately
Skin Contact	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.
Eye Contact	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.
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
Do not use a direct stream of water to extinguish. Use: Powder. Carbon dioxide (CO2).
5.2 Special hazards arising from the product
Specific hazards: When heated and in case of fire, toxic vapours/gases may be formed.
5.3 Advice for firefighters
Protective equipment for fire-fighters: Wear Self-contained breathing apparatus. 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.
6.2 Environmental Precautions
Do not discharge into drains, water courses or onto the ground.
6.3 Methods and material for containment and cleaning up.
Absorb with inert, non-combustible, inorganic absorbent 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
No additional data available.

07. HANDLING AND STORAGE
7.1 Precautions for safe handling
<p>Always wash hands after handling.</p> <p>Remove and wash contaminated clothing before re-using.</p> <p>Remove contaminated clothing and protective equipment before entering eating areas.</p> <p>Emergency showers and eye wash stations will be required in facilities where the mixture is handled constantly.</p> <p>Fire prevention:</p> <p>Handle in well-ventilated areas.</p> <p>Prevent the formation of flammable or explosive concentrations in air and avoid vapour concentrations higher than the occupational exposure limits.</p> <p>Never inhale this mixture.</p> <p>Prevent the accumulation of electrostatic charges with connections to earth.</p> <p>The mixture can become electrostatically charged: always earth during decanting operations. Wear antistatic shoes and clothing and floors should be electrically conductive.</p> <p>Use the mixture in premises free of naked flames or other sources of ignition and ensure that electrical equipment is suitably protected.</p> <p>Keep packages tightly closed and away from sources of heat, sparks and naked flames.</p> <p>Do not use tools which may produce sparks. Do not smoke.</p> <p>Prevent access by unauthorised personnel.</p> <p>Recommended equipment and procedures:</p> <p>For personal protection, see section 8.</p> <p>Observe precautions stated on label and also industrial safety regulations.</p> <p>Avoid eye contact with this mixture at all times.</p>

7.2 Conditions for safe storage, including any incompatibilities
<p>Storage:</p> <p>Keep the container tightly closed in a dry, well-ventilated place.</p> <p>Keep away from food and drink, including those for animals.</p> <p>Keep away from all sources of ignition - do not smoke.</p> <p>Keep well away from all sources of ignition, heat and direct sunlight.</p> <p>Avoid accumulation of electrostatic charges.</p> <p>Packaging</p> <p>Always keep in packaging made of an identical material to the original.</p>

08. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters												
<p>Occupational exposure limits:</p> <p>- ACGIH TLV (American Conference of Governmental Industrial Hygienists, Threshold Limit Values, 2010) :</p> <table> <thead> <tr> <th>CAS</th> <th>TWA :</th> <th>STEL :</th> <th>Ceiling :</th> <th>Definition :</th> <th>Criteria :</th> </tr> </thead> <tbody> <tr> <td>80-56-8</td> <td>20 ppm</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> </tbody> </table>	CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :	80-56-8	20 ppm	-	-	-	-
CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :							
80-56-8	20 ppm	-	-	-	-							
8.2 Exposure controls												
Protective Equipment												
												
Process Conditions	No additional data available.											
Engineering Measures	Provide adequate ventilation.											
Respiratory Equipment	For high concentrations use respiratory equipment.											
Hand Protection	<p>Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN374.</p> <p>Gloves must be selected according to the application and duration of use at the workstation.</p> <p>Protective gloves need to be selected according to their suitability for the workstation in question: other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.</p> <p>Recommended properties:</p> <p>- Impervious gloves in accordance with standard EN374.</p>											
Eye Protection	<p>Avoid contact with eyes.</p> <p>Use eye protectors designed to protect against liquid splashes.</p> <p>Before handling, wear safety goggles in accordance with standard EN166.</p>											
Other Protection	<p>In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with EN13034 to prevent skin contact.</p> <p>Work clothing worn by personnel shall be laundered regularly.</p> <p>After contact with the product, all parts of the body that have been soiled must be washed.</p>											
Hygiene Measures	Remove contaminated clothing and wash the skin thoroughly with soap and water after work.											
Personal Protection	Use personal protection according to Directive 89/686/EEC.											
Skin Protection	<p>Avoid skin contact.</p> <p>Wear suitable protective clothing</p> <p>Suitable type of protective clothing:</p> <p>In the event of substantial spatter, wear liquid-tight protective clothing against chemical risks (type 3) in accordance with EN14605 to prevent skin contact.</p>											

Environmental Exposure Controls	Avoid discharging into drainage water. Only eliminate by authorised companies.
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09. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties	
Appearance	Liquid
Colour	Clear
Odour	Characteristic.
Relative Density @ 20°C	0.880 – 0.900
Flash Point (°C)	91
Refractive Index @ 20°C	1.440 – 1.480
Melting Point (°C)	No additional data available.
Boiling Point (°C)	222
Vapour Pressure	No additional data available.
Solubility in Water @20°C	38.94mg/litre
Auto-ignition temperature (°C)	No additional data available.

9.2 Other information	
No additional data available.	

10. STABILITY AND REACTIVITY

10.1 Reactivity	
No additional data available.	
10.2 Chemical stability	
Stable under the recommended handling and storage conditions.	
10.3 Possible hazardous reactions	
No additional data available.	
10.4 Conditions to Avoid	
Any apparatus likely to produce a flame or to have a metallic surface at high temperature (burners, electric arcs, furnaces etc.) must not be allowed on the premises. Avoid: - accumulation of electrostatic charges. - heating - heat - flames and hot surfaces	
10.5 Incompatible materials	
Materials To Avoid: Strong acids, alkali or oxidising agents.	
10.6 Hazardous Decomposition Products	
The thermal decomposition may release/form: - carbon monoxide (CO) - carbon dioxide (CO ₂).	

11. TOXOLOGICAL INFORMATION

11.1 Information on toxicological effects	
Acute Toxicity	Acute toxicity : BENZYL SALICYLATE (CAS: 118-58-1) Oral route: LD50 = 2200 mg/kg. GERANIOL (CAS: 106-24-1) Oral route: LD50 = 4200 mg/kg THUJONE (CAS: 546-80-5) Oral route: LD50 = 500 mg/kg ALPHA-PINENE X (CAS: 80-56-8) Oral route: LD50 = 3700 mg/kg
Skin corrosion / irritation	May cause irreversible damage to the skin; namely inflammation of the skin or the formation of erythema and eschar or oedema following exposure up to four hours. May cause an allergic reaction by skin contact.
Serious eye damage / irritation	May have irreversible effects on the eyes, such as tissue damage in the eye, or serious physical decay of sight, which is not fully reversible by the end of observation at 21 days. Serious eye damage is typified by the destruction of cornea, persistent corneal opacity and iritis.
Respiratory or skin sensitisation	May cause an allergic skin reaction.
Germ Cell Mutagenicity	No additional data available.
Carcinogenicity	CAS 5989-27-5: IARC Group 3: The agent is not classifiable as to its carcinogenicity to humans
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 toxicity includes severe acute effects such as chemical pneumonia, varying degrees of pulmonary injury or death following aspiration.
Other Information	No additional data available.



12. ECOLOGICAL INFORMATION

12.1 Toxicity
Toxic to aquatic life with long lasting effects. The product must not be allowed to run into drains or waterways. No aquatic toxicity data available for the substances.
12.2 Persistence & degradability
Degradability: No additional data available.
12.3 Bioaccumulation Potential
Bioaccumulative potential: No data available on bioaccumulation.
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
No additional data available.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods	
Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC. Do not pour into drains or waterways.	
Waste: Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals. Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company. Do not contaminate the ground or water with waste, do not dispose of waste into the environment.	
Soiled packaging: Empty container completely. Keep label(s) on container. Give to a certified disposal contractor	

14. TRANSPORT INFORMATION

14.1 UN number	
UN No. Road	1169
UN No. SEA	1169
UN No. AIR	1169
14.2 UN proper shipping name	
UN1169= EXTRACTS, AROMATIC, LIQUID.	
14.3 Transport hazard class(es)	
ADR/RID/ADN Class:	3
ICAO Class/Division:	3
IMDG Class:	3
Transport Labels	
	
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	
	
14.6 Special precautions for user	
UN No. Road UN 3082 ADR Class Class 9 Pk Gp III Hazard No (ADR) 90 Hazchem Code 3Z	

UN No. SEA UN 3082 IMDG Class 9 IMDG Pack Gr. Pk Gp III EMS F-A, S-F UN No. AIR UN 3082 Air Class 9 Air Pack Gr. Pk Gp III
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC code
No additional data available.

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
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 and/or Precautionary Statements in Full	H226 Flammable liquid and vapour. H228 Flammable solid. 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.
Other Information	None.
Revision Date	20/10/2016
Reason for revision	Updated New Format SDS.
Rev No/Repl, SDS Generated	

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