

# MATERIAL SAFETY DATA SHEET.

## **1. IDENTIFICATION OF SUBSTANCE/PREPARATION & COMPANY.**

PRODUCT NAME: CITRONELLA OIL

SUPPLIER: Norfolk Trading 1 Rigby's Crt Norwich NR2 1NT

Telephone +44 (0)1603 610883

## **2. COMPOSITION / INFORMATION ON INGREDIENTS.**

DEFINITION/BOTANICAL ORIGIN: By steam distillation of the grass of Cymbopogon Nardus

H-No: 3301.29	CAS No: 8000-29-1	Status: natural
CoE No: 39	FEMA: 2308	Additives: none
FDA: § 182.20	IFRA: no restriction	Application:
RIFM: monograph	EINECS: 289-753-6	RTECS:
INCI name: Cymbopogon Nardus		FCCIV:

## **3. HAZARDS IDENTIFICATION:**

Concentrated product. Do not ingest. Observe good housekeeping procedures.

## **4. FIRST-AID MEASURES:**

INHALATION:	Remove from exposure site to fresh air. Keep at rest. Obtain medical attention.
EYE CONTACT:	Rinse immediately with plenty of water for at least 15 mins. Contact a doctor if symptoms persist.
SKIN CONTACT:	Remove contaminated clothes. Wash thoroughly with soap & water, flush with plenty of water. If irritation persists, seek medical advice.
INGESTION:	Rinse mouth out with water. Seek medical advice <b>immediately</b> .
OTHER:	When assessing action take Risk & Safety Phrases into account (Section 15)

## **5. FIRE FIGHTING MEASURES.**

EXTINGUISHING MEDIA RECOMMENDED:	Use CO <sub>2</sub> , Dry Powder or Foam type Extinguishers, spraying extinguishing media to base of flames. Do not use direct water jet on burning material.
SPECIAL MEASURES:	Avoid vapour inhalation. Keep away from sources of ignition. Do not smoke. Wear positive pressure self-contained breathing apparatus & protective clothing.
EXTINGUISHING PROCEDURES:	Closed containers may build up pressure when exposed to heat and should be cooled with water spray.

## **6. ACCIDENTAL RELEASE MEASURES.**

PERSONAL PRECAUTIONS:	Avoid inhalation & direct contact with skin & eyes. Use individual protective equipment (safety glasses, waterproof-boots, suitable protective clothing) in case of major spillages.
ENVIRONMENT PRECAUTIONS:	Keep away from drains, soils, surface & groundwaters.
CLEANING UP METHODS FOR SPILLAGES:	Remove all potential ignition sources. Contain spilled material. Cover with an inert or non-combustible inorganic absorbent material, sweep up and remove to an approved disposal container. Observe state,

federal & local disposal regulations.

## **7. HANDLING & STORAGE.**

PRECAUTIONS IN HANDLING:	Apply good manufacturing practice & industrial hygiene practices, ensuring proper ventilation. Observe good personal hygiene, and do not eat, drink or smoke whilst handling.
STORAGE CONDITIONS:	Store in tightly closed original container, in a cool, dry & ventilated area away from heat sources & protected from light. Keep air contact to a minimum.
FIRE PROTECTION:	Keep away from ignition sources & naked flames. Take precautions to avoid static discharges in working area.

## **8. EXPOSURE CONTROLS/ PERSONAL PROTECTION.**

RESPIRATORY PROTECTION:	Avoid breathing product vapour. Apply local ventilation where possible.
VENTILATION:	Ensure good ventilation of working area.
HAND PROTECTION:	Avoid all skin contact. Use chemically resistant gloves if required.
EYE PROTECTION:	Use safety glasses.
WORK/HYGIENE PRACTICES:	Wash hands with soap & water after handling.

## **9. PHYSICAL & CHEMICAL PROPERTIES.**

COLOUR:	Pale yellow
APPEARANCE:	Liquid
ODOUR:	Sweet citral
FLASH-POINT °C:	73
SPECIFIC GRAVITY @ 20°C:	0.880-0.895
REFRACTIVE INDEX @ 20°C:	1.4650-1.4750
TYPICAL ANALYSIS BY GC/MS:	Limonene 3.0%, Citronellal 32.5%, Citronellyl acetate 3.8%, Borneol 2.9%, Geranyl acetate 5.1%, Citronellol 11.9%, Geraniol 22.7%, Elemol 3.0%, Eugenol 1.1%.

## **10. STABILITY & REACTIVITY.**

REACTIVITY:	It presents no significant reactivity hazards, by itself or in contact with water. Avoid contact with strong acids, alkali or oxidising agents.
DECOMPOSITION:	Liable to cause smoke & acrid fumes during combustion: carbon monoxide, carbon dioxide & other non-identified organic compounds may be formed.

## **11. TOXICOLOGICAL INFORMATION.**

LD <sub>50</sub> orl rat: 7200mg/kg (Pharmazie (1959) 14, 435)	
LD <sub>50</sub> ipr rat: 713mg/kg	LD <sub>50</sub> orl mus: 4600mg/kg
LD <sub>50</sub> skn rbt: 4700mg/kg	skn rbt: 500mg/24hr RIFM Monograph (1973) FCT 11, 1067 (cymbopogon nardus only)

## **12. ECOLOGICAL INFORMATION.**

BIODEGRADABILITY:	Data not available
PRECAUTIONS:	Prevent surface contamination of soil, ground & surface water.

## **13. DISPOSAL CONSIDERATIONS.**

Avoid disposing to drainage systems and into the environment. Seek expert advice.

#### **14. TRANSPORT REGULATIONS.**

Road (ADR/RID): n/a  
AIR (IATA): n/a  
SEA (IMDG): n/a  
CHIP: See section 15

#### **15. REGULATORY INFORMATION.** According to Directive 88/379/EEC

HAZARDS: n/a  
SYMBOLS: n/a  
RISK PHRASES: n/a  
SAFETY PHRASES: Not classified as dangerous (Directive 88/379/EEC)

#### **16. OTHER INFORMATION.**

##### **PACKAGING:**

Type	Suitability
Glass	Yes
Lacquer lined steel/tin	Yes
Aluminium	Yes
HPPE	No
F/HDPE	Yes
Other plastic	No

##### **SHELF-LIFE**

Min 12 months when stored within advised conditions.

##### **Q.C. REQUIREMENTS.**

In-line with general product specification. Always satisfy suitability for specific application.

Retest after 6 months.

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