



# Safety Data Sheet

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

Product Name	<b>Lemongrass oil Organic.</b>
Biological Definition	Is the volatile oil obtained by steam distillation of the cut & slightly dried grass <i>Cymbopogon flexuosus</i> (Nees ex Seud) W. Wats Staph.
INCI Name	Cymbopogon flexuosus oil.
Synonyms & Trade Names	Cochin Grass oil, Malabar Grass oil.

Reach Registration Number <small>(According to EU Reg 1907/2006)</small>	N/A				
FEMA No.	2624	FDA No.	§182.20	CoE No.	2045/38
CAS-No	8007-02-1	EC No.	295-161-9	EINECS No.	295-161-9

## 02. HAZARDS IDENTIFICATION

Classification (1999/45)	Xi+N; R36/38-43-51/53, S24-26-37-61
Classification (EC 1272/2008)	UN-GHS: FL 4, ATD 5(2800), SCI 2, SS 1, EDI 1, EH A2,C2 EU-CLP: SCI 2, SS 1, EDI 1, EH A2,C2
Label in accordance with (EC) No 1272/2008	  GHS07      GHS09
Signal Word	Warning
Contains	Citral, geraniol, limonene
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	P262 Do not get on skin, in eyes or on clothing

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Supplementary Precautionary Statements	P280 Wear protective gloves/protective clothing/eye protection/face protection. P305/351/338 If in eyes: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing P273 Avoid release to the environment P391 Collect spillage
PBT or vPvB according to Annex XIII	No
Adverse physio-chemical properties	Combustible but will not self-ignite
Adverse effects on human health	May cause sensitisation or damage to skin and eyes.

## 03. COMPOSITION/INFORMATION ON INGREDIENTS

75% to 80% Citral	UN-GHS: ATO 5(4950), ATD 5(2250), SCI 2, SS 1, EH A2
4% Geraniol	UN-GHS: ATO 5(4200), SCI 2, EDI 1, SS 1, EH A2
3% Geranyl acetate	UN-GHS: SCI 3, EH A2,C2
2% Limonene	UN-GHS: SCI 2, SS 1, EH A1,C1
2% Methyl heptenone	UN-GHS: ATO 5(4100), EH A3,SCI 3
1.4% beta-Caryophyllene	UN-GHS: SCI 3
1% Linalool	UN-GHS: ATO 5(3000), EDI 2A, EH A3, SCI 2

## 04. FIRST AID MEASURES

General Information	See categories below
Inhalation	Remove from exposure area to fresh air. Contact a doctor if necessary.
Ingestion	Wash mouth out with water and obtain medical advice immediately.
Skin Contact	Remove contaminated clothing. Wash thoroughly with soap and water. Seek medical advice if irritation persists or there is any sign of tissue damage.
Eye Contact	Flush with plenty of water and seek medical advice if necessary.

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## 05. FIRE-FIGHTING MEASURES

Extinguishing Media	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 Fire Fighting Procedures	Wear protective clothing. Avoid inhalation of vapours.
Specific Hazards	None
Protective Measures in Fire	Closed containers may build up pressure when exposed to heat and should be cooled with water spray



## 06. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Maintain good occupational and personal hygiene. Avoid contact with skin and eyes
Environmental Precautions	Do not discharge directly into drains or soil. Keep away from surface and ground water
Spill Clean Up Methods	Soak up spillage with sand or other inert material. Transfer soaked material to suitable waste container and dispose according to prevailing regulations.

## 07. HANDLING AND STORAGE

Usage Precautions	Apply good manufacturing practice & industrial hygiene practices, ensuring proper workplace ventilation. Observe good personal hygiene, and do not eat, drink or smoke whilst handling.
Storage Precautions	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.

## 08. EXPOSURE CONTROLS/PERSONAL PROTECTION

Protective Equipment	  Goggles      Gloves
Engineering Measures	Ensure good ventilation of working area.
Respiratory Equipment	As required. Avoid breathing product vapour.
Hand Protection	Avoid all skin contact. Use chemically resistant gloves if required.
Eye Protection	Use safety glasses.

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Other Protection	As required
Hygiene Measures	Wash hands with soap & water after handling

## 09. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Mobile liquid
Colour	Bright yellow
Odour	Characteristic - Strong citrus/lemon-like odour
Relative Density	0.869 to 0.896 @ 25°C
Flash Point (°C)	71 c/c
Refractive Index	1.483 to 1.489 @ 25°C
Melting Point (°C)	No additional data available
Boiling Point (°C)	224 @ 760 mm Hg
Vapour Pressure	0.07 mm Hg @ 25°C
Solubility in Water @20°C	84.7 mg/L @ 25°C
Auto-ignition temperature (°C)	No additional data available

## 10. STABILITY AND REACTIVITY

Stability	It presents no significant reactivity hazards, by itself or in contact with water.
Conditions to Avoid	Avoid storage temperatures above 25°C
Materials to Avoid	Avoid contact with strong acids, alkalis and oxidising agents.
Hazardous Decomposition Products	Liable to cause smoke & acrid fumes during combustion: carbon monoxide, carbon dioxide & other non-identified organic compounds may be formed.

## 11. TOXOLOGICAL INFORMATION

Acute Toxicity	Acute oral toxicity oral-rat LD50 > 5000 mg/kg Food and Cosmetics Toxicology. <b>14</b> , 457 (1976). Acute dermal toxicity skin-rabbit LD50 > 5000 mg/kg Food and Cosmetics Toxicology <b>14</b> , 457 (1976).
Skin corrosion /	Category 2 under GHS & CLP following EU 1272/2008 guidelines

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irritation	
Serious eye damage / irritation	Potential for serious eye damage exists. Wear eye/face protection when handling.
Respiratory or skin sensitisation	Skin sensitiser category 1 under GHS & CLP following EU 1272/2008 guidelines.
Germ Cell Mutagenicity	Components of lemongrass oil (e.g. citral) have shown anti-mutagenic effects in mice against the nuclear damage caused by cyclophosphamide, mitomycin C and nickel chloride: Rabbani, S. I. et al. "Anti-clastogenic effects of citral." <i>Iranian Journal of Pharmacology &amp; Therapeutics</i> <b>4</b> :28-31(2005).
Carcinogenicity	None of the major components of lemongrass oil from <i>Cymbopogon citratus</i> have carcinogenic potential Carbajal D et al. "Pharmacological study of <i>Cymbopogon citratus</i> leaves." <i>J. Ethnopharmacology</i> <b>25</b> :103-7 (1989).
Reproductive toxicity	Lack of genotoxic effects in mice observed after 21 day oral intake of <i>Cymbopogon citratus</i> essential oil Food and Chemical Toxicology <b>49</b> : 2268–2272.
STOT-single exposure	No additional data available
STOT-repeated exposure	No additional data available
Aspiration hazard	Not classified but aspiration hazard exists. Wear aspirator in contaminated areas.
Photo-toxicity	Not listed as photo-toxic
Other Information	- - -

## **12. ECOLOGICAL INFORMATION**

Ecotoxicity	Insufficient data to classify
Mobility	No additional data available
Persistence & Biodegradability	No additional data available
Bioaccumulation Potential	No additional data available
PBT Assessment Results	No additional data available
Precautions	Do not discharge into the environment especially into waterways.

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## 13. DISPOSAL CONSIDERATIONS

### Disposal Methods

Do not release into the environment. Collect waste into suitable containers and contact hazardous chemical disposal company.

## 14. TRANSPORT INFORMATION

### Warning Icon



### Proper Shipping Name

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID N.O.S (Oil of Lemongrass)

### UN No. Road

UN 3082

### ADR Class

Class 9

### Hazard No (ADR)

Not found

### Hazchem Code

Not found

### UN No. SEA

UN 3082

### IMDG Class

Class 9

### IMDG Pack Gr.

Pk Gp III

### EMS

F-A, S-F

### UN No. AIR

UN 3082

### Air Class

Class 9

### Air Pack Gr.

Pk Gp III

## 15. REGULATORY INFORMATION

### EU Directives

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18<sup>th</sup> Dec 2006 Concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 199/45/EC and repealing Council Regulation Council Regulation (EEC) No793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, and 93/105/EEC and 2000/21/EC including amendments.

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Statutory Instruments	The Chemicals (Hazard Information and Packaging for Supply Regulations 2009 (S.I. 2009 No 716).
Approved Code of Practice	Classification and Labelling of Substances and Preparations Dangerous for Supply. Safety Data Sheets for Substances and Preparations
Guidance Notes	Workplace Exposure Limits EH40. CHIP for everyone HSG 108.

## 16. OTHER INFORMATION

Revision Date	1/2015
Rev No/Repl, SDS Generated	2
Risk Phrases in Full	R36/38 Irritating to eyes & skin R43 May cause sensitisation by skin contact R51/53 Toxic to aquatic organisms and may cause long-term adverse effects in the aquatic environment
Hazard Statements in Full	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
Other Information	Complies with REACH guidance for SDS as circulated by ECHA 2011.

**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 himself as to the suitability of such information for his own particular use.