# Safety Data Sheet

**Organic Lemongrass Essential Oil (Cymbopogon citratus)**

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

### 1.1 Product Identifier

<table>
<thead>
<tr>
<th><strong>Product Name</strong></th>
<th>Lemongrass Oil Organic</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Biological Definition</strong></td>
<td>Cymbopogon Citratus Leaf Oil is an essential oil obtained from the leaves of the Lemon Grass, <em>Cymbopogon citratus</em>, Poaceae. It contains citral (75-85%), methylheptenone, citronellal, geraniol, limonene</td>
</tr>
<tr>
<td><strong>INCI Name</strong></td>
<td>Cymbopogon Citratus Leaf Oil</td>
</tr>
<tr>
<td><strong>Synonyms &amp; Trade Names</strong></td>
<td>Lemon Grass Oil; Indian Verbena Oil; Indian Melissa Oil</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>CAS-No</strong></th>
<th>89998-14-1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EC No.</strong></td>
<td>289-752-0</td>
</tr>
<tr>
<td><strong>EINECS No.</strong></td>
<td>289-752-0</td>
</tr>
</tbody>
</table>

### 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

NHR Organic Oils, 24 Chatham Place, Brighton, East Sussex, BN1 3TN, UK.

Email – info@nhrorganicoils.com

### 1.4 Emergency Tel. No.

+ 44 (0) 1273 746505

## 2. 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)**

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

### 2.2 Label Elements

Label in accordance with (EC) No 1272/2008

<table>
<thead>
<tr>
<th><strong>GHS05</strong></th>
<th><strong>GHS07</strong></th>
<th><strong>GHS09</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Hazard Symbol" /></td>
<td><img src="image2" alt="Warning Symbol" /></td>
<td><img src="image3" alt="Environmental Symbol" /></td>
</tr>
</tbody>
</table>

**Signal Word** Danger

**Contains** Citral, Geraniol

**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**

P272 Contaminated work clothing should not be allowed out of the workplace.
### 2.3 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

#### 3.2 Mixtures

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Ingredient</th>
<th>CAS-No.</th>
<th>EC-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>70.0 – 78.0%</td>
<td>CITRAL</td>
<td>5392-40-5</td>
<td>226-394-6</td>
</tr>
<tr>
<td>4.0 – 6.0%</td>
<td>Geraniol</td>
<td>106-24-1</td>
<td>203-377-1</td>
</tr>
<tr>
<td>1.0 – 2.5%</td>
<td>Limonene</td>
<td>5989-27-5</td>
<td>227-813-5</td>
</tr>
</tbody>
</table>

**Classification (EC 1272/2008)**
- Skin Irrit. 2 - H315
- Eye Irrit. 2 - H319
- Skin Sens. 1 - H317
- Eye Dam. 1 - H318
- Skin Sens. 1 - H317
- Flam. Liq. 3 - H226
- Skin Irrit. 2 - H315
- Skin Sens. 1 - H317
- Asp. Tox. 1 - H304
- Aquatic Acute 1 - H400
- Aquatic Chronic 1 - H410

### 4. FIRST AID MEASURES

#### 4.1 Description of first aid measures

<table>
<thead>
<tr>
<th>Description</th>
<th>Inhalation</th>
<th>Ingestion</th>
<th>Skin Contact</th>
<th>Eye Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remove victim immediately from source of exposure. Rinse nose and mouth with water. Get medical attention if any discomfort continues.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do not induce vomiting. Ingestion may cause nausea and vomiting. Immediately rinse mouth and provide fresh air. Get medical attention if symptoms persist.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes widely apart. Get medical attention immediately. Continue to rinse.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

5.1 **Extinguishing Media**
Extinguishing media: Carbon dioxide (CO2). Dry chemical powder.

5.2 **Special hazards arising from the product**
When heated and in case of fire, irritating vapours/gases may be formed.

5.3 **Advice for firefighters**
Avoid inhalation of generated fumes or vapours. Use appropriate respiratory equipment. Do not allow spillage into drains or waterways. Water spray should be used to cool containers.

6. **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 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 pickup is complete. Dispose of in accordance with current laws and regulations.

6.4 **Reference to other sections**
Wear protective clothing as described in Section 8 of this safety data sheet.

7. **HANDLING AND STORAGE**

7.1 **Precautions for safe handling**
Keep away from food and drink. When using do not smoke. Avoid contact with skin and eyes. Handle in accordance with good hygiene and safety practice. Ensure adequate ventilation of the working area.

7.2 **Conditions for safe storage, including any incompatibilities**
Keep product in its original container well sealed, in a dry, ventilated area, away from potential sources of ignition and protected from light. Stock according to local / national regulations and always follow the precautions indicated on labels.

7.3 **Specific end use(s)**
No additional data available.

8. **EXPOSURE CONTROLS/PERSOAL PROTECTION**

8.1 **Control parameters**
Linalool (CAS: 78-70-6) Ingredient Comments: No exposure limits noted for ingredient(s).
EUGENOL (CAS: 97-53-0) Ingredient Comments: WEL = Workplace Exposure Limits

8.2 **Exposure controls**
Protective Equipment
Process Conditions: Provide eyewash station.

Engineering Measures: Provide adequate ventilation.

Respiratory Equipment: For high concentrations use respiratory equipment.

Hand Protection: Wear chemical resistant gloves (PVC) to avoid skin contact.

Eye Protection: Wear approved safety goggles.

Other Protection: Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene Measures: Good personal hygiene practices are always advisable, especially when working with chemicals / oils.

Personal Protection: Use personal protection according to Directive 89/686/EEC.

Skin Protection: Wear apron or protective clothing to avoid skin contact.

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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>Yellowish to yellow/orange</td>
</tr>
<tr>
<td>Odour</td>
<td>Sweet, lemon like</td>
</tr>
<tr>
<td>Relative Density</td>
<td>0.869 – 0.910 @ 20°C</td>
</tr>
<tr>
<td>Flash Point (°C)</td>
<td>71.0 – 85.0</td>
</tr>
<tr>
<td>Refractive Index</td>
<td>1.460 – 1.490 @ 20°C</td>
</tr>
<tr>
<td>Melting Point (°C)</td>
<td>No additional data available.</td>
</tr>
<tr>
<td>Boiling Point (°C)</td>
<td>No additional data available.</td>
</tr>
<tr>
<td>Vapour Pressure</td>
<td>0.05 mmHg.</td>
</tr>
<tr>
<td>Solubility in Water @20°C</td>
<td>1:10 v/v Ethanol 90%</td>
</tr>
<tr>
<td>Auto-ignition temperature (°C)</td>
<td>No additional data available.</td>
</tr>
</tbody>
</table>

#### 9.2 Other information

No additional data available.

### 10. STABILITY AND REACTIVITY

#### 10.1 Reactivity

Stable under the recommended handling and storage conditions.

#### 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

Avoid heat, flames and other sources of ignition.

#### 10.5 Incompatible materials

Avoid 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 fumes and oxides.

11. TOXOLOGICAL INFORMATION

11.1 Information on toxicological effects

<table>
<thead>
<tr>
<th>Acute Toxicity</th>
<th>Toxic Dose 1 - LD 50 4400 mg/kg (oral rat)</th>
<th>Toxic Dose 2 - LD 50 &gt;2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin corrosion / irritation</td>
<td>May cause sensitisation by skin contact.</td>
<td></td>
</tr>
<tr>
<td>Serious eye damage / irritation</td>
<td>Spray and vapour in the eyes may cause irritation and smarting.</td>
<td></td>
</tr>
<tr>
<td>Respiratory or skin sensitisation</td>
<td>In high concentrations, vapours may irritate throat and respiratory system and cause coughing.</td>
<td></td>
</tr>
<tr>
<td>Germ Cell Mutagenicity</td>
<td>No additional data available.</td>
<td></td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>No additional data available.</td>
<td></td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>No additional data available.</td>
<td></td>
</tr>
<tr>
<td>STOT-single exposure</td>
<td>No additional data available.</td>
<td></td>
</tr>
<tr>
<td>STOT-repeated exposure</td>
<td>No additional data available.</td>
<td></td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>No additional data available.</td>
<td></td>
</tr>
<tr>
<td>Photo-toxicity</td>
<td>No additional data available.</td>
<td></td>
</tr>
<tr>
<td>Other Information</td>
<td>Toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment.</td>
<td></td>
</tr>
</tbody>
</table>

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Dangerous for the environment: May cause long-term adverse effects in the aquatic 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

General information
Do not re-use empty containers. Empty residue into a suitable disposal site.

Dispose of in compliance with all local and national regulations.

14. TRANSPORT INFORMATION

14.1 UN number
### 14.2 UN proper shipping name
ENVIROMENTALLY HAZARDOUS SUBSTANCE LIQUID N.O.S.

### 14.3 Transport hazard class(es)

<table>
<thead>
<tr>
<th>ADR/RID/ADN Class</th>
<th>IMDG Class</th>
<th>ICAO Class/Division</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>9</td>
<td>9</td>
</tr>
</tbody>
</table>

**Transport Labels**

![Transport Label]

### 14.4 Packing group

<table>
<thead>
<tr>
<th>ADR/RID/ADN Packing group</th>
<th>IMDG Packing group</th>
<th>ICAO Packing group</th>
</tr>
</thead>
<tbody>
<tr>
<td>III</td>
<td>III</td>
<td>III</td>
</tr>
</tbody>
</table>

### 14.5 Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant

![Environmental Hazard]

### 14.6 Special precautions for user

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

### 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

Guidance Notes
Workplace Exposure Limits EH40. CHIP for everyone HSG(108).

EU Legislation

15.2 Chemical safety assessment

No additional information available.

16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>Hazard and/or Precautionary Statements in Full</th>
<th>H315 Causes skin irritation.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>H317 May cause an allergic skin reaction.</td>
</tr>
<tr>
<td></td>
<td>H318 Causes serious eye damage.</td>
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<td></td>
<td>H411 Toxic to aquatic life with long lasting effects.</td>
</tr>
<tr>
<td>Other Information</td>
<td>None</td>
</tr>
<tr>
<td>Revision Date</td>
<td>02/12/2015</td>
</tr>
<tr>
<td>Reason for revision</td>
<td>New style updated SDS</td>
</tr>
<tr>
<td>Rev No/Repl, SDS Generated</td>
<td>02</td>
</tr>
</tbody>
</table>

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