1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Citronella Essential Oil (Ceylon)

Botanical name : Cymbopogon nardus

Synonyms : Citronella Oil

INCI name : Cymbopogon nardus (Citronella) Oil

Country of Origin : Sri Lanka

Product use : Domestic and Industrial

Supplier : KIS OILS

Address : 4629 SE 17st, Portland, OR 97202

Telephone number : (718) 557-9352

2. HAZARDS IDENTIFICATION

Emergency Overview

WHMIS Classification
N/A

GHS Label elements, including precautionary statements

Signal : Warning[][]
**Inhalation**
May be harmful if inhaled. Causes respiratory tract irritation

**Skin**
May be harmful if absorbed through skin. Causes skin irritation.

**Eyes**
Causes eye irritation

**Ingestion**
May be fatal if swallowed.

### 3. COMPOSITION / INFORMATION INGREDIENTS

<table>
<thead>
<tr>
<th>Product Name</th>
<th>CAS NO</th>
<th>EC NO</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geraniol</td>
<td></td>
<td></td>
<td>55%</td>
</tr>
<tr>
<td>Citronellol</td>
<td></td>
<td></td>
<td>8.6%</td>
</tr>
</tbody>
</table>

### 4. FIRST AID MEASURES

**Eye contact**
Immediately flush eyes with plenty of cool water for at least 15 minutes. Get medical attention if irritation occurs.

**Skin contact**
Remove contaminated clothing. Wash area with soap and water. If irritation occurs, get medical attention.

**Inhalation**
If inhaled, removed to fresh air. Get medical attention if symptoms appear.

**Ingestion**
Seek medical attention or contact local poison control center.

### 5. FIRE FIGHTING MEASURES

**Suitable extinguishing media**

**Special protective equipment and precautions for fire-fighters**
Wear proper protective equipment. Exercise caution when fighting any chemical fire. Use water spray or fog for cooling exposed containers.

**Special hazards arising from the substance or its combustible products**
Hazardous decomposition products may be formed at extreme heat or if burned.

**Resulting gases**
Carbon oxides.

### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures.**
Equip clean crew with proper protection. Respiratory protection equipment may be necessary.
Environmental precautions
Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

Methods and materials for containment and cleaning up
Clean up any spills as soon as possible, using an absorbent material to collect it. Use suitable disposal containers.

7. HANDLING AND STORAGE

Precautions for safe handling
No direct lighting. No smoking. Ensure prompt removal from eyes, skin and clothing. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Handle in accordance with good industrial hygiene and safety procedures.

Conditions for safe storage, including any incompatibilities
Provide local exhaust or general room ventilation to minimize dust and/or vapour concentrations. Keep container closed when not in use.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure controls
For room temperature handling only.

Eyes
Use tightly sealed goggles.

Skin
If skin contact or contamination of clothing is likely, protective clothing should be worn. Use protective gloves.

Respiratory
In case of insufficient ventilation, wear suitable respiratory equipment.

Ingestion
This may be fatal if ingested and aspirated.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Pale yellow to yellowish brown liquid.

Odor : Characteristic citrusyl odor of citronella.

Flash point : 81°C

Relative density : 0.893 – 0.910 @ 25°C

Solubility (ies) : Soluble in alcohol and oils. Insoluble in water.

Refractive index : 1.479 – 1.485 @ 20°C

Optical rotation : -9.0 - +18.0 @ 25°C

10. STABILITY AND REACTIVITY
Reactivity
This material presents no significant reactivity hazard.

Chemical stability
Chemically stable.

Possibility of hazardous reactions
Hazardous polymerization will not occur.

Conditions to avoid
Avoid sparks, flame and other heat sources.

Incompatible materials
Strong oxidizing agents.

Hazardous decomposition products
Carbon Oxides.

11. TOXICOLOGICAL INFORMATION

Carcinogenicity
None of the components of this material are listed as a carcinogen.

Chronic toxicity
May cause allergic reactions on skin.

Reproductive toxicity
No adverse effects on reproduction are known.

Inhalation
Inhalation of high concentrations of vapor may result in irritation of eyes, nose and throat, headache, nausea, and dizziness.

Skin contact
Adverse skin effects should be prevented by normal care and personal hygiene.

Eye contact
Possible irritation should be prevented by wearing safety glasses.

Ingestion
May be fatal if ingested and aspirated.

Repeated exposure
Repeated or prolonged contact may cause difficulty in breathing.

Aspiration hazard
May be fatal if ingested and aspirated.

12. ECOLOGICAL INFORMATION

Ecotoxicity
Toxic to aquatic organisms, may cause long-term adverse effects environment. Avoid any pollution.
of ground, surface or underground water.

13. DISPOSAL CONSIDERATION

Dispose of product in accordance with local, state or provincial and federal regulations. Check with local municipal authority to ensure compliance.

14. TRANSPORT INFORMATION

US DOT Shipping Description (Land)
Not regulated.

IMO-IMDG Shipping Description (Sea)
Not dangerous goods

IATA Shipping Description (Air)
Not dangerous goods.

Emergency action in case of accident
Notify police and fire department immediately

15. REGULATORY INFORMATION

WHMIS Classification
N/A

HMIS (USA)
Health Hazard – 0; Fire Hazard -3; Reactivity – 0.

SARA 302
None.

SARA 313
None.

California Proposition 65
This product does not contain chemicals listed per the Safe Drinking Water and Enforcement Act of 1986.

16. OTHER INFORMATION

Disclaimer & Caution:
The information contained in Material Safety Data Sheet is obtained from current and reliable sources. The information contained herein is true and to the best of KIS OILS knowledge. Nothing herein should be interpreted as a recommendation to infringe existing patents or violate any laws or regulation. Final determination of the suitability of the material is the sole responsibility of the user. Customers should purchase products from KIS OILS, with the clear understanding that all products must be used at the customers own discretion and only after referencing Material Safety data Sheets(MSDS) and all other relevant technical information specific to the product. KIS OILS. shall not be held responsible for any damages to the property or for any adverse physical effects (including injury or bodily harm) caused by insufficient knowledge or the improper use of a product. The user of
the product is solely responsible for compliance with all laws and regulations applying to the use of the products, including intellectual property rights of third parties. As with any manufacturing process, KIS OILS strongly recommends small lab scale testing for evaluation purposes prior to full commercial manufacturing. The information on the KIS OILS website is obtained from current and reliable sources but makes no representation as to its comprehensiveness or accuracy. Nothing contained herein should be considered as a recommendation by KIS OILS as to the fitness for any use. As the ordinary or otherwise use(s) of this product is outside the control of KIS OILS, no representation or warranty, expressed or implied is made as to the effect(s) of such use(s) (including damage or injury), or the results obtained. The liability of KIS OILS is limited to the value of the goods and does not include any consequential loss. KIS OILS shall not be liable for any errors or delays in the content, or for any actions taken in reliance thereon.