1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Citronella Essential Oil (Java)
Botanical name : Cymbopogon nardus
INCI name : Cymbopogon nardus (Citronella) Oil
CAS # : 8000-29-1
Country of Origin : Indonesia
Product use : Domestic and Industrial
Supplier : Essential Depot, Inc.
Address : 4605 Oak Circle, Sebring, FL 33870
Fax : 
Telephone number : 866-840-2495
Emergency phone number : 863-658-4398 Monday-Friday 9am-6pm

2. HAZARDS IDENTIFICATION

Emergency Overview

WHMIS Classification
D2B Materials Causing
. Other Toxic Effects

GHS Classification
Aspiration hazard - Category 1
Skin Sensitization - Category 1
Serious eye damage/eye irritation - Category 2B
Hazardous to the aquatic environment - Chronic Category 2

GHS Label elements, including precautionary statements

![Label Icon]
Signal : Warning

Hazard statement(s)
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 statement(s)
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302 + 352 IF ON SKIN: Wash with plenty of soap and water.
P305 + 351 + 338 IF IN EYES: Rinse cautiously with water for several minutes.
P333 + 313 If skin irritation occurs: Get medical advice/attention.
P310 Immediately call a POISON CENTER or doctor/physician.

HMIS Classification & Potential Health Effects

HMIS Ratings
Health : 2, Flammability : 2, Physical Hazard : 1

Inhalation
May be harmful if inhaled. Causes respiratory tract irritation

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

Eyes
Causes serious eye damage.

Ingestion
May be harmful 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>Citronellal</td>
<td></td>
<td></td>
<td>32 - 45%</td>
</tr>
<tr>
<td>Citronellol</td>
<td></td>
<td></td>
<td>10 - 15%</td>
</tr>
<tr>
<td>Geranial</td>
<td></td>
<td></td>
<td>12 - 30%</td>
</tr>
<tr>
<td>Citronellyl Acetate</td>
<td></td>
<td></td>
<td>1 - 4%</td>
</tr>
<tr>
<td>Geranyl Acetate</td>
<td></td>
<td></td>
<td>3 - 8%</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

Unsuitable extinguishing media
Water spray, water jet.

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
Measures should be taken to prevent materials from being splashed into the eyes or on the skin. Wear eye shields and protective clothing. Smoking should not be permitted in work areas. Provide suitable air extraction ventilation in the work areas. Vapors may form explosive mixtures with air. Keep material away from sources of ignition (e.g. hot surfaces, sparks, flame and static discharges.

Conditions for safe storage, including any incompatibilities
To be stored in tightly sealed and preferably full containers in cool, dry and ventilated area. Protect from heat/overheating and light sources. Keep in glass, suitable plastic, aluminum or lacquer-lined containers.
8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

**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.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Pale yellow to yellow liquid.</td>
</tr>
<tr>
<td>Odor</td>
<td>Fresh sweet odor.</td>
</tr>
<tr>
<td>Flash point</td>
<td>80°C.</td>
</tr>
<tr>
<td>Relative density</td>
<td>0.875 - 0.893 @ 25°C</td>
</tr>
<tr>
<td>Solubility (ies)</td>
<td>Insoluble in water. 1 vol clear soluble in 2ml of 80% ethanol.</td>
</tr>
<tr>
<td>Refractive index</td>
<td>1.466 – 1.474 @ 20°C</td>
</tr>
<tr>
<td>Optical rotation</td>
<td>-7° to -0° @ 25°C</td>
</tr>
</tbody>
</table>

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.

12. ECOLOGICAL INFORMATION

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

Persistence and degradability
Generally biodegradable.

Bio - accumulative potential
Unlikely to bioaccumulate. Contaminated water must be cleared before entering sewerage.

Mobility in soil
Very low water solubility and will form a surface film.

Other adverse effects
Not available.

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)
UN 3082

Proper shipping name
Environmentally hazardous substance, liquid, n.o.s.

Class
9

Packaging group
III
IMO-IMDG Shipping Description (Sea)
UN 3082

Proper shipping name
Environmentally hazardous substance, liquid, n.o.s.

Class
9

Packaging group
III

IATA Shipping Description (Air)
UN 3082

Proper shipping name
Environmentally hazardous substance, liquid, n.o.s.

Class
9

Packaging group
III

15. REGULATORY INFORMATION

WHMIS Classification
Class D2B: Materials Causing Other Toxic Effects - Toxic Material.

DSL / NDSL
Not available.

TSCA
Not available.

HMIS (USA)
Health : 2, Flammability : 2, Physical Hazard : 1

GHS Hazard Statements
See Section 2.

GHS Precautionary Statements
See Section 2.

16. OTHER INFORMATION
Revision date : July 20, 2016

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