1. PRODUCT AND COMPANY IDENTIFICATION

<table>
<thead>
<tr>
<th>Product name</th>
<th>Calamus Root Essential Oil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Botanical name</td>
<td>Acorus calamus</td>
</tr>
<tr>
<td>INCI name</td>
<td>Acorus Calamus Root Oil</td>
</tr>
<tr>
<td>CAS #</td>
<td>84775-39-3 / 8015-79-0</td>
</tr>
<tr>
<td>Country of Origin</td>
<td>India</td>
</tr>
<tr>
<td>EINECS #</td>
<td>283-869-0</td>
</tr>
<tr>
<td>Product use</td>
<td>Domestic and Industrial</td>
</tr>
<tr>
<td>Supplier</td>
<td>New Directions Aromatics Inc.</td>
</tr>
<tr>
<td>Address</td>
<td>6781 Columbus Road, Mississauga, Ontario, CANADA L5T 2G9</td>
</tr>
<tr>
<td>Fax</td>
<td>905-362-1926</td>
</tr>
<tr>
<td>Telephone number</td>
<td>905-362-1915</td>
</tr>
<tr>
<td>Emergency phone number</td>
<td>(613)-996-6666 CANUTEC 24 HOUR EMERGENCY</td>
</tr>
</tbody>
</table>

2. HAZARDS IDENTIFICATION

Emergency Overview

GHS Classification

- Flammable liquids - Category 4
- Acute Toxicity, Oral - Category 4
- Skin corrosion/irritation - Category 3
- Skin Sensitization - Category 1
- Hazardous to aquatic environment - Acute - Category 2
- Hazardous to the aquatic environment, long-term hazard - Category 3

GHS Label elements, including precautionary statements

Signal: Warning

Hazard statement(s)

- H227 Combustible liquid.
- H302 Harmful if swallowed.
- H316 Causes mild skin irritation.
- H317 May cause an allergic skin reaction.
- H401 Toxic to aquatic life.
- H411 Toxic to aquatic life with long-lasting effects.
Precautionary statement(s)

P210  Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261  Avoid breathing dust/fumes/gas/mist/vapours/spray.
P264  Wash eyes and skin thoroughly after handling.
P270  Do not eat, drink or smoke when using this product.
P272  Contaminated work clothing should not be allowed out of the workplace.
P273  Avoid release to the environment.
P280  Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312  IF SWALLOWED: Call a POISON CENTER/doctor/if you feel unwell.
P302+P352  IF ON SKIN: Wash with plenty of water.
P321  Specific treatment (see section 4 on this label).
P330  Rinse mouth.
P332+P313  If skin irritation occurs: Get medical advice/attention.
P333+P313  If skin irritation or a rash occurs: Get medical advice/attention.
P363  Wash contaminated clothing before reuse.
P370+P378  In case of fire: Use appropriate fire extinguisher to extinguish.
P403+P235  Store in a well ventilated place. Keep cool.
P501  Dispose of contents/container in accordance with local/regional/national regulations.

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>Acorus Calamus Root Oil</td>
<td>84775-39-3/8015-79-0</td>
<td>283-869-0</td>
<td>100 %</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**
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**
An eyewash fountain and / or safety shower should be available in the work area. Acceptable industrial hygiene practices should be maintained. These precautions are for room temperature handling. Use at elevated temperature or aerosol / spray applications may require additional precautions.

**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**
Not for ingestion.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Yellow to yellowish brown, slightly viscous liquid.</td>
</tr>
<tr>
<td>Odor</td>
<td>Characteristic spicy, warm, woody odor.</td>
</tr>
<tr>
<td>Flash point</td>
<td>125 °C</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.0350 to 1.1050 @ 25°C</td>
</tr>
<tr>
<td>Solubility (ies)</td>
<td>Soluble in alcohol and oils. Insoluble in water.</td>
</tr>
<tr>
<td>Refractive index</td>
<td>1.543 to 1.552 @ 25°C</td>
</tr>
<tr>
<td>Optical rotation</td>
<td>0° to +1° @ 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 strong reheating 70 °C. Avoid sparks, flame and other heat sources.

**Incompatible materials**
Strong oxidizing agents.

**Hazardous decomposition products**
Carbon Oxides.

### 11. TOXICOLOGICAL INFORMATION

**Acute toxicity**
Not available.

**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**
Low order toxicity causing irritation of the stomach and intestines which results in nausea and vomiting.

**Repeated exposure**
Repeated or prolonged contact may cause redness, irritation and scaling of skin (Dermatitis).

### 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 regulated.

IATA Shipping Description (Air)
Not regulated.

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

15. REGULATORY INFORMATION

California Proposition 65
This product contains chemical(s) listed under the California Proposition 65 list. Contains: β -Myrcene and Methyleugenol.

GHS Hazard Statements
Refer to Section 2.

GHS Precautionary Statements
Refer to Section 2.

16. OTHER INFORMATION

Revision date : July 27, 2018

Disclaimer & Caution
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