1. PRODUCT AND COMPANY IDENTIFICATION

**Product name**: Bergamot-Bergaptene Free (Calabrian) Essential Oil

**Botanical name**: Citrus bergamia, Risso

**INCI name**: Citrus Aurantium Bergamia Peel Oil

**CAS #**: 89957-91-5

**Country of Origin**: Italy

**EINECS #**: 289-612-9

**Product use**: Domestic and Industrial

**Supplier**: New Directions Aromatics Inc.

**Address**: 6781 Columbus Road, Mississaugua, Ontario, CANADA L5T 2G9

**Fax**: 905-362-1926

**Telephone number**: 905-362-1915

**Emergency phone number**: (613)-996-6666 CANUTEC 24 HOUR EMERGENCY

2. HAZARDS IDENTIFICATION

**Emergency Overview**

**GHS Classification**

- Flammable liquids - Category 3
- Aspiration Hazard - Category 1
- Skin corrosion/irritation - Category 2
- Skin sensitization - Category 1
- Eye damage/irritation - Category 2
- Hazardous to the aquatic environment - Chronic - Category 3

**GHS Label elements, including precautionary statements**

- **Signal**: Danger

- **Hazard statement(s)**
  - H226 Flammable liquid and vapour.
  - H304 May be fatal if swallowed and enters airways.
  - H315 Causes skin irritation.
  - H317 May cause an allergic skin reaction.
  - H319 Causes serious eye irritation.
  - H412 Harmful to aquatic life with long-lasting effects.
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>Limonene</td>
<td>138-86-3</td>
<td>138-86-3</td>
<td>30-50%</td>
</tr>
<tr>
<td>Citral</td>
<td>53952-40-5</td>
<td>226-394-6</td>
<td>0.1 - 1.5%</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 Monoxide, Carbon Dioxide.

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**
Odor is inadequate to warn of overexposure.

**Eyes**
The use of safety glasses is recommended. If a material is to be handled in a manner where splashing may occur, the use of splash goggles or face shield is recommended.

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

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

**Ingestion**
Not for ingestion.

**Control parameters**
Citral (CAS: 5392-40-5): OEL type: ACGIH - TWA (8h): 5 ppm

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance</strong></td>
<td>Colorless to pale green-yellow liquid.</td>
</tr>
<tr>
<td><strong>Odor</strong></td>
<td>Fresh and citrusy odor.</td>
</tr>
<tr>
<td><strong>Flash point</strong></td>
<td>57 °C</td>
</tr>
<tr>
<td><strong>Relative density</strong></td>
<td>0.866 to 0.878 @ 20 °C</td>
</tr>
<tr>
<td><strong>Solubility (ies)</strong></td>
<td>Soluble in alcohol and oils. Insoluble in water.</td>
</tr>
<tr>
<td><strong>Partition coefficient</strong></td>
<td>log Kow 2.14 to 6.3</td>
</tr>
<tr>
<td><strong>Refractive index</strong></td>
<td>1.462 to 1.468 @ 20 °C</td>
</tr>
<tr>
<td><strong>Optical rotation</strong></td>
<td>+20° to +40° @ 20 °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
Strongly oxidizing and reducing agents.

Hazardous decomposition products
When heated to decomposition produces acid fumes and carbon monoxide smoke.

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
LC50 - Dphania: 33 mg/l (48h)

Persistence and degradability
Readily biodegradable.

Bio - accumulative potential
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
UN Number
1169
UN proper shipping name
Extracts, aromatic, liquid
Transport hazard class
3
Packing group
III
US DOT Shipping Description (Land)
1169
Proper shipping name
Extracts, aromatic, liquid
Class
3
Packaging group
III
IMO-IMDG Shipping Description (Sea)
1169
Proper shipping name
Extracts, aromatic, liquid
Class
3
Packaging group
III
IATA Shipping Description (Air)
1169
Proper shipping name
Extracts, aromatic, liquid
Class
3
Packaging group
III

15. REGULATORY INFORMATION

GHS Hazard Statements
Please refer to section 2.
GHS Precautionary Statements
Please refer to section 2.

16. OTHER INFORMATION

Revision date : February 28, 2018
Disclaimer & Caution

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