1. PRODUCT AND COMPANY IDENTIFICATION

- **Product name**: Ajowan Essential Oil
- **Botanical name**: Trachyspermum copticum
- **Synonyms**: Ajwain, Indian Thyme, Trachyspermum ammi, Carum copticum
- **INCI name**: Carum Copticum Fruit Extract
- **CAS #**: 8001-99-8
- **Country of Origin**: India
- **EINECS #**: 91745-13-0
- **Product use**: Domestic and Industrial
- **Supplier**: New Directions Aromatics Inc.
- **Address**: 6781 Columbus Road, Mississauga, 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**
Hazardous to the aquatic environment, long-term hazard - Category 2

**GHS Label elements, including precautionary statements**

- **Signal**: Not applicable
- **Hazard statement(s)**
  - H411: Toxic to aquatic life with long lasting effects.
- **Precautionary statement(s)**
  - P273: Avoid release to the environment.
  - P391: Collect spillage.
  - P501: Dispose of contents/container according to local 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>Thymol</td>
<td>89-83-8</td>
<td>201-944-8</td>
<td>20 - 60%</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
Do NOT induce vomiting unless to do so by medical personnel. Never give anything by mouth to an unconscious person. Rinse mouth with water. Seek medical attention.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media
Carbon Dioxide, dry chemical or foam. Closed containers may build up pressure at elevated temperature. Use water spray or fog in case of huge fire.

Special protective equipment and precautions for fire-fighters
Self-contained breathing apparatus and protective clothing should be worn when fighting fires involving essential oils or chemicals.

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
Keep away from drains, surface and ground water. Report spills to appropriate authorities as required.

Methods and materials for containment and cleaning up
Small spills should be absorbed with an inert material and put the spilled material in an appropriate waste disposal. 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
Keep away from heat. Keep away from sources of ignition. Do not breath gas, fumes, vapour or spray. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid contact with skin and eyes.

Conditions for safe storage, including any incompatibilities
Store in tightly closed HDPE or Aluminum containers in a cool dry place protected from light. 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
These precautions are for room temperature handling. Use at elevated temperature or aerosol / spray applications may require additional precautions. An eyewash fountain and / or safety shower should be available in the work area. Acceptable industrial hygiene practices should be maintained.

Eyes
As a precaution, wear safety glasses or goggles. An eyewash and safety shower should be readily available.
Skin
Wear standard industrial type rubber gloves. A rubber apron is recommended when handling large quantities of this material.

Respiratory
Avoid breathing directly on the product. Apply local ventilation when appropriate. 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 brownish yellow liquid.</td>
</tr>
<tr>
<td>Odor</td>
<td>Characteristic odor.</td>
</tr>
<tr>
<td>Flash point</td>
<td>57 °C</td>
</tr>
<tr>
<td>Relative density</td>
<td>0.880 to 0.950 @ 20 °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>1.4830 to 1.5150 @ 20 °C</td>
</tr>
<tr>
<td>Optical rotation</td>
<td>-1.0° to +5.0°</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Chemical stability
Chemically stable. This material presents no significant reactivity hazard.

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

Incompatible materials
Strong oxidizing agents.

Hazardous decomposition products
Carbon Oxides.

11. TOXICOLOGICAL INFORMATION

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
May irritate eyes.

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

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
Not available.

Bio - accumulative potential
Not available.
Mobility in soil
Not available.

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

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 | June 14, 2018 |

Disclaimer & Caution

Please refer to all relevant technical information specific to the product, prior to use. The information contained in this document is obtained from current and reliable sources. New Directions Aromatics Inc. provides the information contained herein, but makes no representation as to its comprehensiveness or accuracy. Individuals receiving this information must exercise their independent judgment in determining its appropriateness for a particular purpose. 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 the ordinary or otherwise use(s) of this product is outside the control of New Directions Aromatics Inc., 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 New Directions Aromatics Inc. is limited to the value of the goods and does not include any consequential loss. New Directions Aromatics Inc. shall not be liable for any errors or delays in the content, or for any actions taken in reliance thereon. New Directions Aromatics Inc. shall not be responsible for any damages resulting from use of or reliance upon this information. In the event of any dispute, the Customer hereby agree that Jurisdiction is limited to the province of Ontario.