

## 1. PRODUCT AND COMPANY IDENTIFICATION

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|                        |   |  |
|------------------------|---|--|
| Product name           | : | Garlic Essential Oil                                     |
| Botanical name         | : | Allium sativum   |
| INCI name              | : | Allium Sativa Bulb Oil                                   |
| CAS #                  | : | 8000-78-0  |
| 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

Flammable Liquid - Category 3

Acute toxicity, Oral - Category 4

Skin Irritation - Category 2

Skin Sensitization - Category 1

Serious eye damage/eye irritation - Category 2A

Hazardous to the aquatic environment, long-term hazard - Category 3

Hazardous to the aquatic environment, long-term hazard - Category 2

#### GHS Label elements, including precautionary statements



Signal: Warning

#### Hazard statement(s)

|      |  |
|------|--|
| H226 | Flammable liquid and vapour.                     |
| H302 | Harmful if swallowed.                            |
| H315 | Causes skin irritation.                          |
| H317 | May cause an allergic skin reaction.             |
| H319 | Causes serious eye irritation.                   |
| H402 | Harmful 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.                                       |
| P240           | Ground/bond container and receiving equipment.   |
| P241           | Use explosion-proof electrical/ventilating/lighting/equipment.   |
| P242           | Use only non-sparking tools.   |
| P243           | Take precautionary measures against static discharge.  |
| P272           | Contaminated work clothing should not be allowed out of the workplace.   |
| P280           | Wear protective gloves/protective clothing/eye protection/face protection.   |
| P301+P310      | IF SWALLOWED: Immediately call a POISON center or doctor/physician.  |
| P303+P361+P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.                                 |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.     |
| P332+P313      | If skin irritation occurs: Get medical advice/attention.   |
| P333+P313      | If skin irritation or a rash occurs: Get medical advice/attention.   |
| P337+P313      | If eye irritation persists get medical advice/attention.   |
| P370           | In case of fire: Use extinguishing media listed in Section 5 of the SDS to extinguish.   |
| P403+P235      | Store in a well ventilated place. Keep cool.   |
| P501           | Dispose of contents and container in accordance with local, regional, national and/or international regulation for hazardous wastes. |

**3. COMPOSITION / INFORMATION INGREDIENTS**

| Product Name           | CAS NO    | EC NO | Concentration |
|------------------------|-----------|-------|---------------|
| Allium Sativa Bulb Oil | 8000-78-0 | -     | 100 %         |

**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**

Foam. Dry Powder. Carbon dioxide.

**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**

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### **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**

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### **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**

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### **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**

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|                  |   |  |
|------------------|---|--|
| Appearance       | : | Yellow to orange liquid.                         |
| Odor             | : | Very strong garlic aroma.                        |
| Flash point      | : | 53 °C  |
| Relative density | : | 1.0400 to 1.1180 @ 25°C                          |
| Solubility (ies) | : | Soluble in alcohol and oils. Insoluble in water. |
| Refractive index | : | 1.559 to 1.579 @ 25°C                            |

## **10. STABILITY AND REACTIVITY**

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### **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.

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**11. TOXICOLOGICAL INFORMATION**

**Acute toxicity**

LD50 Oral - Rat - 1,360 mg/kg.

Note: Toxicology information is gathered from reference and research sources.

**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).

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**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.

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**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

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### UN Number

1992

### UN proper shipping name

Flammable liquids, toxic, n.o.s. (Garlic Oil)

### Transport hazard class

3

### Packing group

III

### US DOT Shipping Description (Land)

1992

### Proper shipping name

Flammable liquids, toxic, n.o.s. (Garlic Oil)

### Class

3

### Packaging group

III

### IMO-IMDG Shipping Description (Sea)

1992

### Proper shipping name

Flammable liquids, toxic, n.o.s. (Garlic Oil)

### Class

3

### Packaging group

III

### IATA Shipping Description (Air)

1169

### Proper shipping name

Extracts, aromatic, liquid

### Class

3

### Packaging group

III

## 15. REGULATORY INFORMATION

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### California Proposition 65

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

### GHS Hazard Statements

Please refer to section 2.

### GHS Precautionary Statements

Please refer to section 2.

## 16. OTHER INFORMATION

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### **Disclaimer & Caution**

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