



NEW DIRECTIONS AROMATICS

MATERIAL SAFETY DATA SHEET

SECTION: 1.1 PRODUCT IDENTIFICATION

Product Name: Sunflower Oil - Refined High Oleic
Botanical Name: *Helianthus annuus*
Synonyms: *Helianthus lenticularis*, *Helianthus aridus*
INCI Name: Helianthus annuus (sunflower) seed oil
CAS #: 8001-21-6
Country of Origin: Canada

SECTION: 1.2 COMPANY IDENTIFICATION

Company: New Directions Aromatics Inc.
Address: 6781-Columbus Road, Mississauga. L5T 2G9 Canada
Telephone No: 905-362-1915
FAX: 905-362-1926

24 HOUR EMERGENCY TELEPHONE NUMBER: (613)-996-6666 CANUTEC

SECTION: 2. COMPOSITION / INFORMATION INGREDIENTS

Oleic Acid (GLC): 74.0 – 88.0 %
Linoleic Acid (GLC): 3 – 16.0 %

SECTION: 3. HAZARDS IDENTIFICATION

N/A

Medical Information: N/A

SECTION: 4. FIRST AID MEASURES

Eye Contact: Contact with eyes can produce burning sensation. Irrigate with water immediately, continue flushing eyes with water for 15 minutes. Seek medical attention if irritation persists.
Inhalation: Remove to fresh air.
Ingestion: Rinse mouth with water.
Skin Contact: Skin contact can produce irritation, or itching of the skin.

SECTION: 5. FIRE FIGHTING MEASURES

Flash Point: >100 °C (Open cup)
Extinguishing media: Carbon Dioxide, dry chemical or foam. Closed containers may build up pressure at elevated temperature
Special Procedures: Determine the need to evacuate or isolate the area according to your local emergency plan.
Unusual Firefighting Hazards: None identified.
Protective Equipment: Self-contained breathing apparatus and protective clothing should be worn when fighting fires involving oils or chemicals.
Combustion Product: Carbon Monoxide, Carbon Dioxide

SECTION: 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use of self-contained breathing apparatus is recommended
Safety Precautions: Eliminate all ignition sources. Ventilate area. Determine the need to Evacuate or isolate the area according to your local emergency plan.



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Environmental Precautions: Keep away from drains, surface and ground water. Report spills to appropriate Authorities if required.

Methods For Cleaning Up: Contain and collect with inert absorbent material and place in suitable container for disposal. Comply with all federal, state, and local regulation. Wipe small spills with cloth. Clean with hot water and detergent.

SECTION: 7. HANDLING AND STORAGE

Handling: Avoid contact with skin and eyes. Good personal hygiene practices should be used.

Storage: Containers should be kept closed in order to minimize contamination. Store in a cool, dry, well ventilated place protected from light.

SECTION: 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Eyes Protection: 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

Respiratory Protection: In well- ventilated areas, respiratory protection is not normally required.

Protective Gloves: Using chemical resistant gloves is recommended.

Protective Clothing: Using chemical resistant clothing is recommended.

Protective Equipment: An eyewash fountain and / or safety shower should be available in the work area. Acceptable industrial hygiene practices should be maintained.

SECTION: 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear pale yellow to dark yellow liquid

Odor: Odorless

Solubility: Soluble in alcohol and oils. Insoluble in water.

Specific Gr.: 0.917 @25°C

Refractive Index: 1.465 – 1.470 @°C

Iodine Value: 75 - 95

Peroxide Value: 1.0 meq/kg max.

SECTION: 10. STABILITY AND REACTIVITY

Stability: Chemically stable.
This material presents no significant reactivity hazard.

Conditions to Avoid: Avoid sparks, flame and excessive heat.

Materials to Avoid: Strong oxidizing agents.

Flammability: Combustible liquid.

Hazardous Polymerization: Will not occur.

Hazardous Combustion or Decomposition Products: None known.
When heated to decomposition produces carbon dioxide and monoxide smoke.

SECTION: 11. TOXICOLOGICAL INFORMATION

Inhalation: N/A

Skin Contact: Repeated or prolonged contact may cause irritation.



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| | |
|---------------------------------------------------|--------------------|
| Eye Contact: | May irritate eyes. |
| Ingestion: | Low order toxicity |
| Medical Conditions Aggravated by Exposure: | N/A |
| Chronic Toxicity: | N/A |
| Carcinogenicity Data: | N/A |
| Reproductive Toxicity: | N/A |
| Acute Toxicity Values: | N/A |

SECTION: 12. ECOLOGICAL INFORMATION

Non-toxic to aquatic organism may not cause long-term adverse effects in the aquatic environment. Avoid any pollution of ground, surface or underground water.

SECTION: 13. DISPOSAL CONSIDERATION

Incineration or sanitary landfill in accordance with local, provincial and federal regulations. Check with disposal expert to insure compliance

SECTION: 14. TRANSPORT INFORMATION

| | |
|-------------------------------------|-----------------------------|
| US DOT Shipping Description: | Check appropriate authority |
| IATA Shipping (Air): | Check appropriate authority |
| IMDG Shipping Description: | Check appropriate authority |

SECTION: 15. REGULATORY INFORMATION

| | |
|------------------------|--------------------------------------------------|
| WHMIS (Canada): | Not Available |
| HMIS (USA): | Health Hazard – 0 Fire Hazard – 1 Reactivity – 0 |

SECTION: 16. OTHER INFORMATION

Revision Date: November 10, 2011

SECTION: 17. DISCLAIMER

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NEW DIRECTIONS AROMATICS

CERTIFICATE OF ANALYSIS

Product: Sunflower Carrier Oil - Refined High Oleic
Lot # 15062-A02
Expiry Date February 2012

| Properties | Specifications: | Results: |
|-------------------------|--------------------------------------------------|-----------------|
| Appearance: | Clear pale yellow to dark yellow liquid | Complies |
| Odor: | Odorless | Complies |
| Solubility: | Soluble in alcohol and oils. Insoluble in water. | Complies |
| Oleic Acid /C18: | 74.0 – 88.0 % | 83.87 |
| Iodine Value: | 75 – 95 % | 83.87 |

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CERTIFICATE OF ANALYSIS

Product: Sunflower Carrier Oil - Refined High Oleic
Lot # 15062-A02-1
Expiry Date November 2012

| Properties | Specifications: | Results: |
|-------------------------|--------------------------------------------------|-----------------|
| Appearance: | Clear pale yellow to dark yellow liquid | Complies |
| Odor: | Odorless | Complies |
| Solubility: | Soluble in alcohol and oils. Insoluble in water. | Complies |
| Oleic Acid /C18: | 74.0 – 88.0 % | Complies |
| Iodine Value: | 75 – 95 % | Complies |

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