



NEW DIRECTIONS

A R O M A T I C S

MATERIAL SAFETY DATA SHEET

SECTION: 1.1 PRODUCT IDENTIFICATION

Product Name: Hazelnut Carrier Oil
Botanical Name: *Corylus avellana*
Synonyms: *Corylus maxima*, *Corylus pontica*, *Corylus tubulosa*
INCI Name: Corylus avellana (hazel) seed oil
County of Origin: USA

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

Constituents: Myristic, palmitic, palmitoleic, margaric, margaroleic, stearic, oleic, linoleic, a-linolenic, arachidic, eicosanic, behenic and erucic acids.

| | | | | |
|---------------------|----------------|-----------|----------------|-----------|
| Compositions | Oleic Acid: | 68 – 85 % | Stearic Acid: | 1.5 – 4 % |
| | Linoleic Acid: | 7 – 15 % | Palmitic Acid: | 4 – 8 % |

SECTION: 3. HAZARDS IDENTIFICATION

This product is not a hazardous material under Department of Labor definition and contains no hazardous ingredients

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: Do not induce vomiting. Never-give anything by mouth if victim is unconscious, is rapidly-losing or is Convulsing.

Skin Contact: Skin contact with hot oil can produce irritation, or itching of the skin.

SECTION: 5. FIRE FIGHTING MEASURES

Flash Point: >100 °C

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

Safety Precautions: Eliminate all ignition sources. Ventilate area. Determine the need to evacuate or isolate the area according to your local emergency plan.



NEW DIRECTIONS

A R O M A T I C S

MATERIAL SAFETY DATA SHEET

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: Good personal hygiene practices should be used. Contaminated clothing and shoes should be cleaned before re-use.

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.

Respiratory Protection: In well-ventilated areas, respiratory protection is not normally required. In confined, poorly ventilated areas the use of "NIOSH" approved respiratory protection normally required (use only if trained in proper use and with acceptable oxygen level).

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: Pale yellow to golden yellow oily liquid

Odor: Characteristic odor

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

Specific gravity: 0.905 – 0.925 @ 25°C

Refractive Index: 1.470 – 1.473 @ 25°C

Peroxide Value: <2 %

Unsaponifiables: <1 %

Saponification Value: 180 – 200

Iodine Value: 80 – 100

Extraction Method: Cold-pressed of the seeds.

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: Inhalation of high concentrations of hot vapor may result in irritation



NEW DIRECTIONS

A R O M A T I C S

MATERIAL SAFETY DATA SHEET

| | |
|---|---|
| Skin Contact: | of eyes, nose and throat, headache, nausea, and dizziness. |
| Eye Contact: | Repeated or prolonged contact may cause irritation of skin |
| Ingestion: | May irritate eyes. |
| | Low order toxicity causing irritation of the stomach and intestines which results in nausea and vomiting. |
| Medical Conditions Aggravated by Exposure: | May aggravate dermatitis, psoriasis and other skin conditions. |
| Chronic Toxicity: | May cause allergic reactions on skin |
| Carcinogenicity Data: | None of the components of this material are listed as a carcinogen. |
| Reproductive Toxicity: | No adverse effects on reproduction are known. |
| Acute Toxicity Values: | No data is currently available. |

SECTION: 12. ECOLOGICAL INFORMATION

Very toxic to aquatic organism may 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): | N/A |
| HMIS (USA): | Health Hazard – N/A Fire Hazard – N/A Reactivity – N/A |

SECTION: 16. OTHER INFORMATION

Revision Date: December 5, 2011

SECTION: 17. DISCLAIMER

The information contained in this Certificate of Analysis and Material Safety Data Sheet is obtained from current and reliable sources. The information contained herein is true and to the best of New Directions Aromatics knowledge. Nothing herein should be interpreted as a recommendation to infringe existing patents or violate any Laws or Regulation. Final determination of the suitability of the material is the sole responsibility of the user. Customers should purchase products from New Directions Aromatics Inc. with the clear understanding that all products must be used at the customers own discretion and only after referencing Material Safety Data Sheets (MSDS) and all other relevant technical information specific to the product. New Directions Aromatics Inc. shall not be held responsible for any damages to property or for any adverse physical effects (including injury or bodily harm) caused by insufficient knowledge or the improper use of a product. 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 with any manufacturing process, New Directions Aromatics strongly recommends small lab scale testing for evaluation purposes prior to full commercial manufacturing. The information on the New Directions Aromatics Inc. website is obtained from current and reliable sources but makes no representation as to its comprehensiveness or accuracy. Nothing contained herein should be considered as a recommendation by New Directions Aromatics Inc. as to the fitness for any use. 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

CERTIFICATE OF ANALYSIS

Product: Hazelnut Carrier Oil
Lot No: 15011-A16-1/B16-1/C16-1
Expiry Date: November 2012

| <u>Properties</u> | <u>Specifications:</u> | <u>Results:</u> |
|------------------------------------|---|-----------------|
| Appearance: | Pale yellow to golden yellow oily liquid | Complies |
| Odor: | Characteristic nutty odor | Complies |
| Solubility: | Insoluble in water. | Complies |
| Specific gravity: | 0.905 – 0.925 @ 25°C | Complies |
| Refractive Index: | 1.470 – 1.473 @ 25°C | Complies |
| Free Fatty Acid (%) Ca5a-40 | 0.175 | Complies |
| Iodine Value: Cd1-25 | 85 – 100 | Complies |

DISCLAIMER:

The information contained in this Certificate of Analysis is obtained from current and reliable sources. New Directions Aromatics Inc. provides the information contained herein in good faith 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. 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. New Directions Aromatics Inc. expressly disclaims responsibility as to the ordinary or otherwise use(s). Furthermore, nothing contained herein should be considered as a recommendation by New Directions Aromatics Inc. as to the fitness for any use. 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. 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.

New Directions Aromatics Inc.

6781-Columbus Road, Mississauga, L5T 2G9 Canada

Tel: (905) 362-1915

Fax: (905) 362-1926

www.newdirectionsaromatics.com