



NEW DIRECTIONS AROMATICS

MATERIAL SAFETY DATA SHEET

SECTION: 1.1 PRODUCT IDENTIFICATION

Product Name: Borage Carrier Oil
Botanical Name: *Borago officinalis*
INCI Name: Borago officinalis seed oil
CAS #: 84012-16-8
Country of Origin: China

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:

Total Saturated:	12 – 17.6	Oleic Acid:	14 – 20
Total Monounsaturated:	17 – 32.1	Linoleic Acid:	34 – 50
Total Polyunsaturated:	52 – 69	Gamma-linolenic Acid:	17 – 24
Palmitic Acid:	5 – 11	Eicosanic Acid:	3 – 5
Stearic Acid:	3 – 5		

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. Give oxygen if breathing is labored and seek medical advice. Avoid casual breathing. Signs of over exposure are dizziness and nausea.

Ingestion: Rinse mouth; dilute with milk or water and consult a physician immediately. Do not induce vomiting. Never-give anything by mouth if victim is unconscious, is rapidly-losing or is Convulsing.

Skin Contact: Skin contact can produce irritation, or itching of the skin. Remove contaminated clothing Wash with soap and plenty of water. Seek medical attention if irritation persists..

SECTION: 5. FIRE FIGHTING MEASURES

Flash Point N/A
Extinguishing media: Carbon Dioxide, dry chemical or foam. Closed containers may build up



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Special Procedures:	pressure at elevated temperature 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:	N/A
Safety Precautions:	Eliminate all ignition sources. Ventilate area. Determine the need to Evacuate or isolate the area according to your local emergency plan.
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 inhalation and contact with skin and eyes. Good personal hygiene practices should be used. Wash after any contact, before breaks and meals, and at the end of the work period. 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. Make sure the material does not come into contact with substances listed as: "Materials to Avoid".

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 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 liquid.
Odor:	Characteristic odor.
Solubility:	Soluble in alcohol and oils. Insoluble in water.
Relative Density:	0.915 – 0.935 @°C
Refractive Index:	1.420 – 1.485 @°C
Acid Value:	<1 mg KOH/g
% Unsaponifiables:	<2.0 %
Saponification Value:	185 – 195



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Iodine Value: 125 – 160
Peroxide Value: <5 meq/kg

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 vapor may result in irritation of eyes, nose and throat, headache, nausea, and dizziness.

Skin Contact: Repeated or prolonged contact can cause redness, irritation and scaling of skin (Dermatitis). 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.

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



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SECTION: 15. REGULATORY INFORMATION

WHMIS (Canada): Not Available
HMIS (USA): Health Hazard – Fire Hazard – Reactivity –
SARA 302/ SARA 313: None
EU Classes and Risk Phrases for reference:N/A

SECTION: 16. OTHER INFORMATION

Revision Date: October 27, 2011

SECTION: 17. DISCLAIMER

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CERTIFICATE OF ANALYSIS

Product: Borage Carrier Oil
Product Lot No: 15004-A06
Manufacture Date: August 2010
Expiry Date: August 2011

<u>Properties</u>	<u>Specifications:</u>	<u>Results:</u>
Appearance:	Pale yellow to golden yellow liquid.	Complies
Odor:	Characteristic odor.	Complies
Solubility:	Soluble in alcohol and oils. Insoluble in water.	Complies
Relative Density:	0.915 – 0.935 @°C	Complies
Refractive Index:	1.420 – 1.480 @°C	Complies
Acid Value:	<1 mg KOH/g	Complies
Saponification Value:	185 – 195	Complies
Iodine Value:	125 – 160	Complies
Peroxide Value:	<5 meq/kg	Complies

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CERTIFICATE OF ANALYSIS

Product: Borage Carrier Oil
Product Lot No: 15004-A07/F07
Manufacture Date: April 2011
Expiry Date: April 2013

<u>Properties</u>	<u>Specifications:</u>	<u>Results:</u>
Appearance:	Pale yellow to golden yellow liquid.	Complies
Odor:	Characteristic odor.	Complies
Solubility:	Soluble in alcohol and oils. Insoluble in water.	Complies
Relative Density:	0.915 – 0.935 @°C	Complies
Refractive Index:	1.420 – 1.480 @°C	Complies
Acid Value:	<1 mg KOH/g	Complies
Saponification Value:	185 – 195	Complies
Iodine Value:	125 – 160	Complies
Peroxide Value:	<5 meq/kg	Complies

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