



NEW DIRECTIONS

A R O M A T I C S

MATERIAL SAFETY DATA SHEET

SECTION: 1.1 PRODUCT IDENTIFICATION

Product Name: Tamanu Carrier Oil - Madagascar
Botanical Name: *Calophyllum inophyllum*
Synonyms: *Calophyllum tacamahaca*, *Balsamaria inophyllum*
INCI Name: Calophyllum inophyllum seed oil
CAS #: 68956-68-3
Country 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: Palmitic, myristic, palmitoleic, stearic, oleic, linoleic, linolenic, arachidic, behenic and gadoleic acids, calophyllic acid

Total Saturated:	20 – 34	Stearic Acid:	8 – 16
Total Monounsaturated:	35 – 51	Oleic Acid:	35 – 50
Total Polyunsaturated:	25 – 41	Linoleic Acid:	25 – 40
Palmitic Acid:	12 – 18		

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; 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: >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.



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Protective Equipment: Self-contained breathing apparatus and protective clothing should wear 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.

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.

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. 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 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.

Note: These precautions are for room temperature handling. Use at elevated temperature may require additional precautions

SECTION: 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Dark green viscous oily liquid.

Odor: Characteristic aromatic nutty odor.

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

Refractive Index: 1.470 – 1.487 @ 20°C

Relative Density: 0.910 – 0.929 @ 20°C

Peroxide Value: <10

Acid Value: 28 – 40

Iodine Value: 80 – 100



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Saponification Value: 190 – 210
Appearance: Dark green viscous oily liquid.
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 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

SECTION: 15. REGULATORY INFORMATION

WHMIS (Canada): Not Available
HMIS (USA): Health Hazard –N/A Fire Hazard –N/A Reactivity –N/A
SARA 302/ SARA 313: None



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California Proposition 65:		This product does not contain chemical listed per the Safe Drinking Water and Enforcement Act of 1986.
EU Labeling:	R10	Flammable.
	Xn R22	Harmful if swallowed.
	Xi R38	Irritating to skin
	S36/37/38	Wear suitable protective clothing, gloves and eye/face protection.

SECTION: 16. OTHER INFORMATION

Revision Date: June 14, 2011

SECTION: 17. DISCLAIMER

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CERTIFICATE OF ANALYSIS

Product: Tamanu Oil - Madagascar
Lot#: 15046-A06
Expiry Date: January 2015

Properties	Specifications:	Results:
Appearance:	Dark green viscous oily liquid.	Complies
Odor:	Characteristic aromatic nutty odor.	Complies
Solubility:	Soluble in alcohol and oils. Insoluble in water.	Complies
Refractive Index:	1.470 – 1.487 @ 20°C	Complies
Relative Density:	0.910 – 0.929 @ 20°C	Complies
Acid Value:	<10	Complies
Peroxide Value:	28 – 40	Complies
Iodine Value:	80 – 100	Complies
Saponification Value:	190 – 210	Complies

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