



NEW DIRECTIONS AROMATICS

MATERIAL SAFETY DATA SHEET

SECTION: 1.1 PRODUCT IDENTIFICATION

Product Name: Menthol Crystals
Botanical Name: *Mentha arvensis*
Synonyms: *M. arvensis* var. *piperascens*, *Mentha austriaca*, *Mentha arvensis* L.
Chemical Formula C₁₀H₂₀O
INCI Name: Menthol
CAS# 2216-51-5
Country of Origin: India

SECTION: 1.2 COMPANY IDENTIFICATION

Company: New Directions Aromatics Inc.
Address: 6781 Columbus Road, Mississauga, Ontario, 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

Product Name L-Menthol ; Menthol crystals
Chemical Name Hexahydrothymol
EINECS # 218-690-9
Properties (% w/w) 100% pure

SECTION: 3. HAZARDS IDENTIFICATION

Main Constituents: Menthol

Medical Information:

***DANGER!** May be fatal if swallow. Harmful if inhaled Causes irritation to the skin, eyes and respiratory tract. May also cause allergic reaction. Estimated fatal dose is 2g per average human.*

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.

SECTION: 5. FIRE FIGHTING MEASURES

Flammable Limits: Flash Point: 93°C
Combustible solid. Will ignite if moderately heated

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 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 for any major chemical spill. Refer also to section 8.

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. Keep away from extreme heat and from freezing conditions and away from all sources of ignition. 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. 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:

SECTION: 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Colorless Tranlucent needle-like crystals.

Odor: Characteristic peppermint-like odor.

Refractive Index: 1.455 – 1.500 @ 20°C

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

Specific Gravity: 0.880 – 0.900 @ 20°C



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Flash Point:	93°C
Melting Point:	41.0 – 44.0 °C
Boiling Point	212 °C
Vapor Pressure	Not Available
Vapor Density (air= 1):	Not Available

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 acrid fumes and carbon 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 available, Not tested on animals

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
UN No. 1169:	Aromatic extract
Packaging Group:	III Class: 3



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SECTION: 15. REGULATORY INFORMATION

WHMIS (Canada):		CLASS D-2B: Material causing other toxic effects (TOXIC)
HMIS (USA):		Health Hazard – 2 Fire Hazard – 2 Reactivity – 0
DSCL (EEC):	R36/38	Irritating to eyes and skin.
EU Classes and Risk Phrases for reference:		
Risk symbol	Xi	Irritant
Risk Phrases	R38	Irritating to Eyes
	R38	Irritating to Skin
Safety Phrases	S24	Avoid contact with skin
	S25	Avoid contact with eyes
	S26	Incase of contact wit eyes, rinse immediately with plenty of water and seek medial advice.
	S37	Wear suitable Gloves
	S39	Wear eye/face protection.

SECTION: 16. OTHER INFORMATION

Revision Date:
October 30, 2011

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SECTION: 17. DISCLAIMER

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NEW DIRECTIONS

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CERTIFICATE OF ANALYSIS

Product:	Menthol Crystals	
Lot No.:	16008 - A05	
Manufacturing Date:	September 2010	
Best Before:	September 2012	
<u>Property</u>	<u>Specification</u>	<u>Result</u>
Appearance:	Colorless to pale yellow prismatic or acicular needle-like crystals.	Complies
Odor:	Characteristic peppermint-like odor.	Complies
Refractive Index:	1.455 – 1.500 @ 20°C	Complies
Solubility:	Soluble in alcohol and oils. Insoluble in water.	Complies
Specific Gravity:	0.880 – 0.900 @ 20°C	Complies
Flash Point:	93°C	Complies
Melting Point:	41.0 – 44.0 °C	Complies
Acidity/Alkalinity	Neutral to litmus	Complies
Vapor Pressure	Not Available	Complies

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www.newdirectionsaromatics.com



NEW DIRECTIONS

A R O M A T I C S

CERTIFICATE OF ANALYSIS

Product: Menthol Crystals
Lot No.: 16008 - A06
Manufacturing Date: September 2010
Best Before: September 2015

<u>Properties</u>	<u>Specifications</u>	<u>Results</u>
Appearance:	Colorless to pale yellow prismatic or acicular needle-like crystals.	Complies
Odor:	Characteristic peppermint-like odor.	Complies
Refractive Index:	1.455 – 1.500 @ 20°C	Complies
Solubility:	Soluble in alcohol and oils. Insoluble in water.	Complies
Specific Gravity:	0.880 – 0.900 @ 20°C	Complies
Flash Point:	93°C	Complies
Melting Point:	41.0 – 44.0 °C	Complies
Acidity/Alkalinity	Neutral to litmus	Complies

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