



MATERIAL SAFETY DATA SHEET

MANDARIN OIL

MSDS

1. PRODUCT NAME AND COMPANY IDENTIFICATION

Product Name:	MANDARIN ESSENTIAL OIL
Product Use:	Personal Care Formulations
Company Name:	Natural Sourcing
Company Address:	341 Christian Street, Oxford, CT 06478, USA
Date Issued:	5/20/2008
Emergency Telephone Number:	Chemtrec Tel: (800) 262-8200

2. COMPOSITION/INGREDIENT INFORMATION

Ingredients:	
Steam Distilled Mandarin Peel Oil	100%
Hazardous Components:	Essential oil and derivatives
CAS #:	8008-31-9

3. HAZARDS IDENTIFICATION

Routes of Entry	
Eye Contact:	Irritation will occur
Skin Contact:	May cause irritation upon prolonged exposure
Inhalation:	Inhalation may cause irritation
Ingestion:	Ingestion in large doses may cause human death

4. FIRST AID MEASURES

Eyes:	Flush with plenty of water or eye wash solution for 15 minutes. Get medical attention if irritation persists.
Skin:	Remove contaminated clothing. Wash with soap and flush with plenty of water. Seek medical attention if irritation persists.
Ingestion:	Administer water or milk to dilute. Seek medical attention immediately or call a poison control center.
Inhalation:	Avoid gross inhalation of fumes. Remove to fresh air and seek medical attention if needed.

5. FIRE FIGHTING MEASURES

Flash Point (Method Used):	>49°C Close Cup
Extinguishing Media:	Dry Chemical, Carbon Dioxide, Foam
Special Firefighting Procedures:	Fire fighters should wear positive pressure self-contained breathing apparatus. Cool containers exposed to flame with water. Spray extinguishing media directly into base of fire.
Unusual Fire & Explosion Hazards:	Not established
Hazardous Decomposition Materials:	None

6. ACCIDENTAL RELEASE MEASURES (STEPS FOR SPILLS)

Personal Protection:	Avoid ingestion Follow good industrial practice as to housekeeping, personal hygiene and avoidance of prolonged or repeated contact with the skin or eyes. Wear eye protection, gloves and aprons. Ventilate area well.
Methods for Cleaning Up:	Eliminate all sources of ignition Ventilate area Prevent liquid from entering sewers Small spills can be wiped up with paper rags (place in closed metal waste container) Large spills can be absorbed onto non-flammable absorbent. Wash area with soap and water.

7. HANDLING AND STORAGE

Handling

Safe Handling:	Avoid ingestion Follow good industrial practice as to housekeeping, personal hygiene and avoidance of prolonged or repeated contact with the skin or eyes. Wear eye protection, gloves and aprons. Ventilate area well.
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Storage

Requirements for Storage Areas and Containers:	Store in an area that is cool, dry, and well-ventilated. Do not expose to temperatures over 35 degrees C.
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8. EXPOSURE CONTROL/PERSONAL PROTECTION

Threshold Limit Value:	Not established
OSHA Permissible Limit:	Not established
Work Practice Controls:	Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material: (1) Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored. (2) Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet. (3) Wash exposed skin promptly to remove accidental splashes or contact with this material.
Respiratory:	Avoid casual breathing of vapors
Ventilation:	Local, mechanical exhaust in recommended
Eye:	OSHA approved safety glasses
Skin:	Wear gloves and clothing to avoid skin contact

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid, Oil
Color:	Clear pale to deep green
Odor:	Characteristic of mandarin peel
Vapor Pressure (mm Hg.):	Not available
Flash Point:	>49°C Tag Closed Cup

Boiling Point:	Not available
Melting Point:	Not available
Specific Gravity (H2O = 1):	0.84-0.85
Refractive Index @ 20°C:	1.4720 to 1.4780
Solubility in Water:	Insoluble

10. STABILITY AND REACTIVITY

Stability:	This material is stable under normal conditions
Reactivity:	Material is not pyrophoric, does not react with water, Does not undergo explosive decomposition, is not an oxygen donor, material is shock stable. Will not undergo hazardous exothermic polymerization.
Incompatibility (Materials to Avoid):	Avoid contact with strong oxidizing agents and avoid hot work and sources of ignition on or near empty containers.
Conditions to Avoid:	Avoid contact with sparks, flame and heat.
Hazardous Decomposition or Byproducts:	CO, CO2, smoke and unidentified organic compounds may be formed during combustion.
Hazardous Polymerization:	Will Not Occur

11. TOXICOLOGICAL INFORMATION

CAUTION: Liquid may be irritating to eyes and skin.

ACGIH TLV:	None established
OSHA PEL:	None established
Carcinogenicity:	NTP Monograph: None established IARC Monograph: None established
Acute Toxicity Data:	Oral LD50: None established Dermal LD50: None established Inhalation LC50: None established
Health Hazards (Acute & Chronic):	Ingestion of large quantities: None established Inhalation: None established Skin Contact: Liquid may be irritating Eye Contact: Liquid may be irritating

Note: The above effects are based on evaluation of individual components, the relevancy to the mixture as a whole or to humans is unknown. Handling of this fragrance that results in inhalation of fumes, may cause severe adverse health effects.

12. ECOLOGICAL INFORMATION

No information

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods:	Dispose of according to local, state and federal regulations.
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14. TRANSPORT INFORMATION

Proper Shipping Name:	Terpene Hydrocarbons, N.O.S. (Terpenes)
UN#:	2319
UN Package Group:	III
ERG#:	128

Air/Steamer Transport Information:

Class

Air: 3
Steamer: 3
Required Labels: Flammable Liquid

HMIS:

Health: 1 Flammability: 2 Reactivity: 0 Personal Protection: B

15. REGULATORY INFORMATION

R-Phase:

NA

S-Phase:

NA

16. ADDITIONAL INFORMATION

This information is provided for documentation purposes only.
This product is not considered hazardous under normal conditions of use.

The complete range of conditions or methods of use are beyond our control therefore we do not assume any responsibility and expressly disclaim any liability for any use of this product. Information contained herein is believed to be true and accurate however, all statements or suggestions are made without warranty, expressed or implied, regarding accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof. Compliance with all applicable federal, state, and local laws and local regulations remains the responsibility of the user.

This safety sheet cannot cover all possible situations which the user may experience during processing. Each aspect of your operation should be examined to determine if, or where, additional precautions may be necessary. All health and safety information contained in this bulletin should be provided to your employees or customers.