



**MATERIAL SAFETY DATA SHEET
TANGERINE ESSENTIAL OIL**

MSDS

1. PRODUCT NAME AND COMPANY IDENTIFICATION

Product Name: TANGERINE ESSENTIAL OIL
Product Use: Personal Care Formulations
Company Name: Saffire Blue Inc.
Company Address: 1444 Bell Mill Road, Tillsonburg, ON N4G4G9 Canada
Date Issued: 2/13/2009
Emergency Telephone Number: Chemtrec Tel: (800) 262-8200

2. COMPOSITION/INGREDIENT INFORMATION

Composition:
Oil of tangerine peel 100% by weight
CAS #: 8016-85-1
EINECS #: 297-672-2
FEMA #: 3041

3. HAZARDS IDENTIFICATION

Routes of Entry:

- Eyes
- Skin
- Ingestion
- Inhalation

Eye Contact: Moderate irritation may occur.
Skin Contact: Irritation may occur with prolonged or repeated exposure.
Ingestion: Hazardous in case of ingestion.
Inhalation: Vapor may be irritating to throat, lungs and pulmonary tract.

4. FIRST AID MEASURES

Eyes: Remove lenses if applicable. Flush with plenty of water or eye wash solution for 15 minutes holding lids apart. Get medical attention if irritation persists.

Skin: Remove contaminated clothing. Thoroughly wash the affected area with soap and water. Flush with large quantities of water. Cover with emollient or pure vegetable oil. Seek medical attention if irritation persists.

Ingestion: Seek medical attention or contact local poison control center immediately. Administer water or milk to dilute if advised by medical expert. Do not induce vomiting. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation.

Inhalation: Remove to fresh air. Seek medical attention if necessary.

Serious Inhalation:

Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention.

Medical Conditions Generally Aggravated by Exposure:

No information

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| 5. FIRE FIGHTING MEASURES | |
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Flash Point (Method Used):

46° C Closed Cup

Flammable Limits

LEL: Not Established

UEL: Not Established

Hazardous Combustion Products:

CO₂, CO, irritating smoke and unidentified organic compounds may be formed during combustion.

Extinguishing Media:

- Dry Chemical
- Carbon Dioxide
- Foam

Special Firefighting Procedures:

Note: Do not use water spray except to cool containers

- Wear positive pressure, self contained breathing apparatus.
- Wear protective clothing to prevent contact with skin and eyes.
- Remove containers from fire area.
- Spray extinguishing media directly into the base of the flames.
- Water is unsuitable for use on burning materials but may be used to cool containers exposed to heat.

Unusual Fire & Explosion Hazards:

- Closed containers may build up pressure at elevated temperatures.
- If possible, containers should be cooled with a water spray.

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| 6. ACCIDENTAL RELEASE MEASURES (STEPS FOR SPILLS) | |
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Personal Protection:

- Chemical splash goggles should be worn.
- If in a confined area, a certified/approved vapor respirator should be used.
- Remove individuals if they do not have respiratory/dust protection.
- Wear protective clothing and chemical resistant gloves.

Note: Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product

Environmental Protection:

Notify authorities if large amounts of product enters sewer.

Methods for Cleaning Up:

- Remove any source of flame or sparks.
- Ventilate area
- Prevent liquid from entering the sewers.
- Recover spilled material with pump or absorb onto an inert, absorbent substrate and sweep up.
- Wash area with soap and water.

7. HANDLING AND STORAGE

Handling

Safe Handling:

- Wear safety glasses and chemical resistant gloves.
- Keep away from oxidizing agents, excessive heat, light and sources of ignition.
- Use in a well ventilated area.

Storage

Requirements for Storage Areas and Containers:

- Store in a cool, dry location, in a sealed container in a well ventilated area away from sources of ignition.
- Protect from light.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

Engineering Controls:

- Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.
- Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection

Eye:

Chemical splash goggles or face shield should be worn.

Skin/Body:

Lab coats, boots and chemical resistant gloves should be worn.

Respiratory:

Use adequate ventilation or NIOSH-approved respiratory devices if vapor concentration is high due to heat.

Ventilation:

Handle in well ventilated areas. Ventilation meeting ACGIH Standards should be employed.

Other:

Evaluate need based on application. Slip proof shoes may be worn where spills may occur.

Work/Hygiene Practice:

Use good personal hygiene practices. Limit exposure to product whenever possible. Wash contaminated clothing or shoes before each use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:

Liquid

Color:

Clear, orange/amber

Odor:

Characteristic of tangerine, citrus

Specific Gravity (@25C):

0.8469 g/cm³ (typical)

Refractive Index (@20C):

1.4744 (typical)

Flash Point:

46°C Closed Cup

Boiling Point:

Not Determined

Melting Point:

Not Applicable

Solubility in Water:

Insoluble

10. STABILITY AND REACTIVITY

Stability:

Stable under normal conditions of use

Conditions to Avoid:

Keep away from sources of ignition, flame and heat. Avoid hot work and sources of ignition on or near empty containers.

Incompatibility (Materials to Avoid):

Strong oxidizing agents.

Hazardous Decomposition or Byproducts:

CO₂, CO, irritating smoke and unidentified organic compounds may be formed during combustion.

Hazardous Polymerization: Will Not Occur

11. TOXICOLOGICAL INFORMATION

Routes of Entry: Eye contact, skin, ingestion, inhalation
LIQUID MAY BE IRRITATING TO SKIN & EYES. PRODUCT CONTAINS LIMONENE, A KNOWN SENSITIZER.
D'Limonene(1,8-(9)-p-Menthadiene): LD50 (Oral): > 5,000 mg/kg [Rat/Mouse]
LD50 (Dermal): > 5,000 mg/kg [Rabbit]
Carcinogenicity: NTP Monograph: None established
IARC Monograph: None established
Other Effects: None established

12. ECOLOGICAL INFORMATION

Biodegradability: No information
Aquatic Toxicity: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Bioaccumulation Potential: No information

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods: Do not put into sewer lines. Dispose of according to local, state and federal regulations.

14. TRANSPORT INFORMATION

UN Number: 1169
Transportation Class: 3
Packing Group: III
Marine Pollutant: Yes

15. REGULATORY INFORMATION

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

WHMIS (Canada): D2B/B3 combustible liquid
HMIS (U.S.A.): Health: 2 Fire: 1 Reactivity: 0
National Fire Protection Association (U.S.A.): Health: 2 Flammability: 1 Reactivity: 0

16. ADDITIONAL INFORMATION

This information is provided for documentation purposes only.

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.