



MATERIAL SAFETY DATA SHEET
CITRONELLA ESSENTIAL OIL

MSDS

1. PRODUCT NAME AND COMPANY IDENTIFICATION

Product Name: CITRONELLA ESSENTIAL OIL
Product Use: Personal Care Formulations
Company Name: Saffire Blue Inc.
Company Address: 1444 Bell Mill Road, Tillsonburg, ON N4G4G9 Canada
Date Issued: 01/12/2010
Emergency Telephone Number: Chemtrec Tel: (800) 262-8200

2. COMPOSITION/INGREDIENT INFORMATION

Ingredients:
Steam Distilled Citronella winterianus Oil 100%
Hazardous Components: Essential oil and derivatives
CAS #: 8000-29-1
EINECS #: 294-954-7
FEMA #:

3. HAZARDS IDENTIFICATION

Routes of Entry
Eye Contact: Irritation will occur with possible damage
Skin Contact: May cause irritation or allergic dermatitis upon prolonged exposure
Inhalation: Inhalation may cause irritation in throat and lungs. High concentrations of vapor may cause anesthetic effects.
Ingestion: Harmful if swallowed

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): 81°C Closed Cup
Extinguishing Media: Dry Chemical, Carbon Dioxide, Foam
Unsuitable Media: Water (except to cool containers)

Special Firefighting Procedures: Fire fighters should wear positive pressure self-contained breathing apparatus. Toxic vapors may be released. Cool containers exposed to flame with water. Spray extinguishing media directly into base of fire.

Unusual Fire & Explosion Hazards: None known

Hazardous Decomposition Materials: Burning produces CO and CO₂

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 or wear approved respirators.
 Eliminate all sources of ignition
 Ventilate area or wear approved respirators

Methods for Cleaning Up: 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 or wear approved respirators.

Storage

Requirements for Storage Areas and Containers: Store in an area that is cool, dry, and well-ventilated. Do not expose to temperatures over 60°C.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

Threshold Limit Value: Not established

OSHA Permissible Limit: Not established

Engineering Controls: Provide adequate ventilation. Safety showers and eye wash stations should be located near work areas.
 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:

Work Practice Controls: (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

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| Physical State: | Liquid, Oil |
| Color: | Clear yellow to pale brown |
| Odor: | Characteristic of lemon, herbaceous |
| Vapor Pressure (mm Hg.): | Not available |
| Flash Point: | 81°C |
| Boiling Point: | + 215°C |
| Melting Point: | NA |
| Specific Gravity (H₂O = 1): | 0.878 - 0.895 |
| Refractive Index @ 25 °C: | 1.4660-1.4750 |
| Optical Rotation: | -5° to 0° |
| Solubility in Water: | Insoluble |

10. STABILITY AND REACTIVITY

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| Stability: | This material is stable under normal conditions |
| 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, CO ₂ , 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.

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| ACGIH TLV: | None established |
| OSHA PEL: | None established |
| Carcinogenicity: | NTP Monograph: None established IARC Monograph: None established Oral LD50: > 5000 mg/kg [Rat] |
| Acute Toxicity Data: | Dermal LD50: > 4700 mg/kg [Rabbit] Inhalation LC50: None established |
| Irritancy: | Not Available |
| Sensitization: | Not Available |
| Phototoxicity: | Not Available |

12. ECOLOGICAL INFORMATION

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| Aquatic Toxicity: | Toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment |
| Mobility: | Low mobility in the soil |
| Persistence: | Not available |
| Bio-accumulative Potential: | Not available |

13. DISPOSAL CONSIDERATIONS

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

14. TRANSPORT INFORMATION

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| Customs Rate Code: | 3301 29 41 00 Class: 9 |
| Land Transport: ADR/RID: | UN #: 3082 Packing Group: III Label Name: Environmentally Hazardous Substance, Liquid, N.O.S. Class: 9 |
| Maritime Transport: IMDG: | UN #: 3082 Packing Group: III Label Name: Environmentally Hazardous Substance, Liquid, N.O.S. Marine Pollutant: Yes Class: 9 |
| Air Transport: ICAO-TI/IATA-DGR: | UN #: 3082 Packing Group: III Label Name: Environmentally Hazardous Substance, Liquid, N.O.S. |

15. REGULATORY INFORMATION

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| Federal & State Regulations: | TSCA 8(b) inventory: Citronella Oil |
| Other Regulations: | OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). |
| Other Classifications: | |
| WHMIS (Canada): | Class B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C Class D-2A: Material causing other toxic effects (VERY TOXIC). |
| DSCL (EEC): | R38: Irritating to skin R41: Risk of serious damage to eyes Health Hazard: 2 |
| HMIS (USA): | Fire Hazard: 2 Reactivity: 0 Personal Protection: h |
| National Fire Protection Association (USA): | Health Hazard: 2 Flammability: 2 Reactivity: 0 Specific Hazard: Gloves |
| Protective Equipment: | Lab Coat Approved Vapor Respirator Splash Goggles |

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.