



MATERIAL SAFETY DATA SHEET

SECTION: 1.1 PRODUCT IDENTIFICATION

Product Name: Grapefruit White Essential Oil
Botanical Name: Citrus racemosa
Synonyms: Citrus paradisi
Procedure: Cold-pressed of the peel.
INCI Name: Citrus paradisi (grapefruit) peel oil
Country of Origin: Mexico

SECTION: 1.2 COMPANY IDENTIFICATION

Company: Saffire Blue Inc.
1444 Bell Mill Road
Tillsonburg, ON N4G4G9 Canada
Tel: 519-286-0295

24 HOUR EMERGENCY TELEPHONE NUMBER: (613)-996-6666 CANUTEC

SECTION: 2. COMPOSITION / INFORMATION INGREDIENTS

Chemical Name	CAS Number	EINECS Number	Proportions [%w/w]
Grapefruit White Essential Oil	8016-20-4	289-904-6	100%
Contents:	Limonene, pinene, sabinene, myrcene, octanol, decanol, caryophyllene		
Limonene: >80.0 % by g.c ;			
Myrcene: 1 – 2 % by g.c.			

SECTION: 3. HAZARDS IDENTIFICATION

Hazardous Ingredient: **Limonene:** may be irritating to skin and eyes.
d-limonene: LD50 (oral, rat): 4400 to 5100 mg/kg
LD50 (dermal, rabbit): greater than 5000 mg/kg
LD50 (mice): 5600 to 6600 mg/kg
Medical Information: 0.5 to 5.0 g/kg may cause human death.

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 consciousness 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

Flammable Limits / Flash Point 46 °C
Extinguishing media: Carbon Dioxide, dry chemical or foam.
DO NOT USE direct water jet on burning material.
Special Procedures: Determine the need to evacuate or isolate the area according to your local emergency plan.



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Unusual Firefighting Hazards:	None identified.
Protective Equipment:	Self-contained breathing apparatus and protective clothing should be worn when fighting fires involving essential 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:	These precautions are for room temperature handling. Use at elevated Temperature or aerosol / spray applications may require additional precautions.

SECTION: 9. PHYSICAL AND CHEMICAL PROPERTIES



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Appearance:	Pale yellow to greenish yellow liquid.
Odor:	Characteristic fresh grapefruit odor.
Solubility:	Soluble in alcohol and oils. Insoluble in water.
Specific Gravity:	0.840 – 0.860 @ 20°C
Optical Rotation:	+90.0 – +96.0 @ 20°C
Refractive Index:	1.470 – 1.480 @ 20°C
Extraction Method:	Cold-pressed of the peel.
Melting Point:	Not Available
Boiling Point:	> 35 °C
Vapor Pressure	Not Available
Vapor Density (air= 1):	>1

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.
Hazardous Polymerization:	Will not occur.
Hazardous Combustion or Decomposition Products:	None known.

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

May be 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

Dispose of in accordance with local, provincial and federal regulations. Check with disposal expert to ensure compliance.

SECTION: 14. TRANSPORT INFORMATION

US DOT Shipping Description:	
Proper Shipping Name:	Extracts, aromatic, liquid,



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UN# 1169
Packing Group III
Class: 3
IATA Shipping (Air):
Proper Shipping Name: Extracts, aromatic, liquid,
UN# 1169
Packing Group III
Class: 3
IMDG Shipping Description:
Proper Shipping Name: Extracts, aromatic, liquid,
UN# 1169
Packing Group III
Class: 3
Marine pollutant: yes

SECTION: 15. REGULATORY INFORMATION

WHMIS (Canada): Class D2B/B3 – Combustible liquid with flash point between 37.8°C (100°F) and 93.3°C (200°F).
SARA 302/ SARA 313: None
California Proposition 65: This product does not contain chemical listed per the Safe Drinking Water and Enforcement Act of 1986.
HMIS Rating: Health: 2
Flammability: 2
Reactivity: 0

SECTION: 16. OTHER INFORMATION

Revision Date: January 30, 2014

SECTION: 17. DISCLAIMER

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SAFFIRE BLUE INC.

CERTIFICATE OF ANALYSIS

Product: Grapefruit White Essential Oil
Lot No.: 11066-A23
Best Before: March 2015
Store in air tight container; in a cool dry area; away from direct sunlight.

<u>Properties</u>	<u>Specifications</u>	<u>Results</u>
Appearance:	Pale yellow to greenish-yellow liquid.	Complies
Odor:	Characteristic fresh grapefruit odor.	Complies
Solubility:	Soluble in alcohol and oils. Insoluble in water.	Complies
Specific Gravity:	0.840 – 0.860 @ 25°C	0.8441
Refractive Index:	1.470 – 1.480 @ 20°C	1.4734
%Limonene:	≥80%	94.40%
Myrcene %:	1-3%	1.86%

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