



**MATERIAL SAFETY DATA SHEET**

**SECTION: 1.1 PRODUCT IDENTIFICATION**

**Product Name:** Cedar Leaf (Thuja) Essential Oil  
**Botanical Name:** Thuja occidentalis  
**INCI Name:** Thuja occidentalis leaf oil  
**CAS #:** 8007-20-3  
**EINECS #:** 290-370-1  
**FEMA #:** 2267  
**Country of Origin:** Canada

**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**

**Contents:**  $\alpha$ -thujone,  $\beta$ -thujone, fenchone  
**Composition**  $\alpha$ -thujone: 43.9 – 56.7 % Fenchone: 6.20 – 13.00 %  
 $\beta$ -thujone 8.5 – 12.20%

**SECTION: 3. HAZARDS IDENTIFICATION**

**Caution:** Taken in excess, this essential oil can produce unpleasant results; it was officially listed as an abortifacient (a drug or agent causing abortion) and convulsant in overdose. It is considered to be toxic, causing hypo tension (low blood pressure), and convulsions. Fatalities have been reported. Do not use during pregnancy. Do not use without medical supervision.

**Medical Information:** N/A

**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. Remove contaminated clothing Wash with soap and plenty of water. Seek medical attention if irritation persists.

**SECTION: 5. FIRE FIGHTING MEASURES**

**Extinguishing media:** Carbon Dioxide, dry chemical or foam. Closed containers may build up pressure at elevated temperature



## MATERIAL SAFETY DATA SHEET

<b>Special Procedures:</b>	Determine the need to evacuate or isolate the area according to your local emergency plan.
<b>Firefighting Hazards:</b>	None identified.
<b>Protective Equipment:</b>	Self-contained breathing apparatus and protective clothing should be worn when fighting fires involving essential oils or chemicals.
<b>Combustion Product:</b>	Carbon Monoxide, Carbon Dioxide

### SECTION: 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions:</b>	Use of self-contained breathing apparatus is recommended for any major chemical spill. Refer also to section 8.
<b>Safety Precautions:</b>	Eliminate all ignition sources. Ventilate area. Determine the need to evacuate or isolate the area according to your local emergency plan.
<b>Environmental Precautions:</b>	Keep away from drains, surface and ground water. Report spills to appropriate Authorities if required.
<b>Methods For Cleaning Up:</b>	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

<b>Handling:</b>	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.
<b>Storage:</b>	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

<b>Eyes Protection:</b>	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
<b>Respiratory Protection:</b>	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).
<b>Protective Gloves:</b>	Using chemical resistant gloves is recommended.
<b>Protective Clothing:</b>	Using chemical resistant clothing is recommended.
<b>Protective Equipment:</b>	An eyewash fountain and / or safety shower should be available in the work area. Acceptable industrial hygiene practices should be maintained.
<b>Note:</b>	These precautions are for room temperature handling. Use at elevated temperature or aerosol / spray applications may require additional precautions

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**MATERIAL SAFETY DATA SHEET**

**SECTION: 9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance:</b>	Colorless to pale yellow clear liquid.
<b>Odor:</b>	Characteristic and strong odor.
<b>Solubility:</b>	Soluble in alcohol. Insoluble in water.
<b>Specific Gravity:</b>	0.800 – 0.930 @ 25°C
<b>Optical Rotation:</b>	-14.0 – +26.0 @ 20°C
<b>Refractive Index:</b>	1.445 – 1.465 @ 20°C
<b>Extraction Method:</b>	Steam distillation of the leaves.
<b>Flash Point:</b>	57 °C

**SECTION: 10. STABILITY AND REACTIVITY**

<b>Stability:</b>	Chemically stable. This material presents no significant reactivity hazard.
<b>Conditions to Avoid:</b>	Avoid sparks, flame and excessive heat.
<b>Materials to Avoid:</b>	Strong oxidizing agents.
<b>Hazardous Polymerization:</b>	Will not occur.
<b>Hazardous Combustion or Decomposition Products:</b>	None known. When heated to decomposition produces acid fumes and carbon monoxide smoke.

**SECTION: 11. TOXICOLOGICAL INFORMATION**

<b>Inhalation:</b>	Inhalation of high concentrations of vapor may result in irritation of eyes, nose and throat, headache, nausea, and dizziness.
<b>Skin Contact:</b>	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
<b>Eye Contact:</b>	May irritate eyes.
<b>Ingestion:</b>	Low order toxicity causing irritation of the stomach and intestines which results in nausea and vomiting.
<b>Medical Conditions Aggravated:</b>	No Known toxicity. Avoid use during pregnancy.
<b>by Exposure:</b>	May aggravate dermatitis, psoriasis and other skin conditions.
<b>Chronic Toxicity:</b>	May cause allergic reactions on skin
<b>Carcinogenicity Data:</b>	None of the components of this material are listed as a carcinogen.
<b>Reproductive Toxicity:</b>	No adverse effects on reproduction are known.
<b>Acute Toxicity Values:</b>	No data is currently available.
<b>LD<sub>50</sub> (Oral, Rat) = 830 mg/kg</b>	
<b>LD<sub>50</sub> (Dermal, Rabbit) = 4100 mg/kg</b>	
<b>LC<sub>50</sub> – Not Determined</b>	
Note: Toxicology information is gathered from reference & research sources.	

**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.



**MATERIAL SAFETY DATA SHEET**

**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**

**ADR/RID Land Transport:**

UN #: 1169  
Proper Shipping Name: Extracts, Aromatic, Liquid  
Class: 3  
Packaging Group: III

**IATA Shipping (Air):**

UN #: 1169  
Proper Shipping Name: Extracts, Aromatic, Liquid  
Class: 3  
Packaging Group: III

**IMO Shipping Description:**

UN #: 1169  
Proper Shipping Name: Extracts, Aromatic, Liquid  
Class: 3  
Packaging Group: III  
Marine Pollutant: Not determined

**SECTION: 15. REGULATORY INFORMATION**

**WHMIS (Canada):** Class B3/D2B  
**HMS (USA):** Health Hazard – 0 Fire Hazard – 0 Reactivity – 0  
**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.  
**EU Labeling:** R10 Flammable  
Xn, R22 Harmful if swallowed.  
Xi R38 Irritating to skin  
S36/37/38 Wear suitable protective clothing, gloves and eye/face protection.  
S36/37/38 Wear suitable protective clothing, gloves and eye/face protection.

**SECTION: 16. OTHER INFORMATION**

**Revision Date: October 28, 2013**

**SECTION: 17. DISCLAIMER**

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## **MATERIAL SAFETY DATA SHEET**

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SAFFIRE BLUE INC.

### CERTIFICATE OF ANALYSIS

**Product:** Cedar Leaf (Thuja) Essential Oil  
**Lot No.:** 11026-A13  
**Best Before:** May, 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:	Colorless to pale yellow clear liquid.	Complies
Odor:	Characteristic and strong camphorous sage-like odor.	Complies
Solubility:	Soluble in alcohol and oils. Insoluble in water.	Complies
Specific Gravity:	0.800 – 0.930 @ 25°C	0.9147
Refractive Index:	1.450 – 1.465 @ 20°C	1.4586
% Thujone:	≥ 57%	57.31%

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