



MATERIAL SAFETY DATA SHEET

ARNICA FLOWER  
TOTAL CO2 EXTRACT

MSDS

1. PRODUCT NAME AND COMPANY IDENTIFICATION

**Product Name:** ARNICA FLOWER TOTAL CO2 EXTRACT  
**Product Use:** Personal Care Formulations  
**Company Name:** Saffire Blue Inc.  
**Company Address:** 1444 Bell Mill Road, Tillsonburg, ON N4G4G9 Canada  
**Date Issued:** 05/25/2010  
**Emergency Telephone Number:** Chemtrec Tel: (800) 262-8200

2. COMPOSITION/INGREDIENT INFORMATION

**Ingredients:** Helianthus annus Seed Oil; CAS No: 8001-21-6 EC No: 232-273-9 and Arnica Montana Flower Total CO2 Extract; CAS No: 68990-11-4 EC No: 273-579-2

**INCI:** Helianthus annus Seed Oil (and) Arnica Montana Flower Extract [CO2]

**Contains:** Essential Oil: 0.2-0.4%  
Triterpenediol Esters: 2.0-4.5%  
Total Content of Sesquiterpene Lactones: 3.5-4.5%  
Helenalin: <0.02%  
11  $\alpha$ , 13 dihydrohelenalin: < 0.05%  
Helenalin- and Dihydrohelenalinester: 3.0-5.0%

**Further Information:** No Solvent Residues

3. HAZARDS IDENTIFICATION

**Classifications:** Indications of Danger: Harmful  
R Phrases: Harmful if swallowed  
Hazard Statements: Harmful if swallowed

**Explication of Special Hazards for Human Health and Environment:** Special skid risk by leaking/spilling product.

4. FIRST AID MEASURES

**Eyes:** Flush with plenty of water or eye wash solution for 15 minutes. Get medical attention if irritation persists.

**Skin:** Wash with soap and water- get medical attention if irritation persists.

**Ingestion:** Rinse mouth immediately and drink large quantities of water.

**Inhalation:** Remove to fresh air.

**Medical Conditions Generally Aggravated by Exposure:** None

## 5. FIRE FIGHTING MEASURES

<b>Extinguishing Media:</b>	Dry Chemical, Carbon Dioxide, Foam • Do Not Use Water Except to Cool Containers.
<b>Special Firefighting Procedures:</b>	Cool containers exposed to flame with water. In case of fire, wear self-contained breathing apparatus.
<b>Unusual Fire &amp; Explosion Hazards:</b>	Formation of dangerous fumes possible.

## 6. ACCIDENTAL RELEASE MEASURES (STEPS FOR SPILLS)

<b>Personal Protection:</b>	Avoid contact with skin and eyes, concentrated extracts should not be swallowed.
<b>Environmental Protection:</b>	Keep away from canalization, waterway, and groundwater.
<b>Methods for Cleaning Up:</b>	Remove mechanically, placing in appropriate containers for disposal.

## 7. HANDLING AND STORAGE

<b>Handling</b>	
<b>Safe Handling:</b>	Avoid contact with skin and eyes, concentrated extracts should not be swallowed. Wear splash goggles and oil resistant gloves.
<b>Storage</b>	
<b>Requirements for Storage Areas and Containers:</b>	Store in a cool, dry location, in a sealed container, away from sunlight.

## 8. EXPOSURE CONTROL/PERSONAL PROTECTION

<b>Eye:</b>	Wear splash goggles.
<b>Skin/Body:</b>	Wear oil resistant gloves. Remove contaminated clothing.
<b>Respiratory:</b>	Do not breathe vapor/aerosol.
<b>Ventilation:</b>	Area should be well ventilated.
<b>Other:</b>	Evaluate need based on application.
<b>Work/Hygiene Practice:</b>	Normal work and hygiene practices

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State:</b>	Viscous liquid
<b>Color:</b>	Dark Brown
<b>Odor:</b>	Characteristic
<b>Flash Point:</b>	> 100°C Abel Pensky
<b>Density:</b>	<1 g/cm <sup>3</sup> pycnometer
<b>Solubility in Water:</b>	Insoluble
<b>Solubility in Other Solvents:</b>	Good solubility in fat phases
<b>Solvent Content:</b>	No solvent residues

## 10. STABILITY AND REACTIVITY

<b>Stability:</b>	Stable
<b>Conditions to Avoid:</b>	Heat, open flame and sunlight
<b>Hazardous Decomposition or Byproducts:</b>	None when carefully used
<b>Hazardous Polymerization:</b>	Will Not Occur

**11. TOXICOLOGICAL INFORMATION**

**Acute Toxicity:** LD50 Helenalin Oral 125 mg/kg [Rat]  
LD50 Helenalin Oral 90 mg/kg [Rabbit]  
LD50 11,13 dihydrohelenalin (not stated) 90 mg/kg [Rabbit]

Frequent or prolonged contact with skin may cause dermal irritation.

**Further Information:** Acute toxicity, irritation of the skin and mucous membrane, and mutagenic potential of the preparation assessed by the manufacturer on the basis of the data sheets available on the main components. Information gaps exist on some of the main individual components. However, according to the experience of the manufacturer, no dangers above and beyond those on the product label are to be expected.

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity:** No data for ecological evaluation on hand. Under appropriate use there are no ecological problems to expect. No heavy metals and inorganic components.

**13. DISPOSAL CONSIDERATIONS**

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

**14. TRANSPORT INFORMATION**

**DOT Classification:** Not a DOT controlled material (USA).  
**Class/Division:** Not restricted  
**Proper Shipping Name:** NA  
**Label:** None  
**Packing Group:** NA  
**ID Number:** NA

**15. REGULATORY INFORMATION**

**Danger Symbols:** Xn Harmful

**Hazardous Components to be Indicated on Label:**  
Helenalin; 11- $\alpha$ ,13- Dihydrohelenalin; Helenalin esters and Dihydrohelenalin esters

**Labeling According to EC-Guidelines:** R Phrases: 22 - Harmful if swallowed

S Phrases: 23 - Do not breathe vapors

**Special Labeling for Certain Preparations:**  
Warning - this preparation contains a substance not yet tested completely

**Signal Word:**  
**Warning**

**Pictogram:**  
**Health Hazard**

**Hazard Statements:**  
**H302: Harmful if swallowed**

**GHS Labeling:**

**Precautionary Statements:**  
**P301+P312: IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.**

**P330: Rinse mouth**  
**P270: Do not eat, drink or smoke when using this product.**  
**P264: Wash hands thoroughly after handling.**

**National Regulatory Information:**

**Water Contaminating Class D:** 1- slightly water contaminating

#### **16. ADDITIONAL INFORMATION**

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

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.