

MATERIAL SAFETY DATA SHEET

1. Product Identification:

Product Name: Wintergreen Oil

Botanical Name: Gaultheria procumbens

Synonyms: Gaultheria repens

INCI Name: Gaultheria procumbens (wintergreen) leaf oil

CAS #: 68917-75-9

Country of Origin: India

2. Classification:

Chemical Identification: Oils, wintergreen UN No. 1169: Extracts, Aromatic, Liquid Guide 127: Polar/Water Miscible; Flammable

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

3. Hazardous Ingredients Information:

Methyl salicylate – toxin.

4. Physical & Chemical Properties:

Appearance: Colorless to pale yellow clear liquid.

Odor: Characteristic intense sweet woody odor.

Solubility: Soluble in alcohol and oils. Insoluble in water.

Boiling Point: 215 - 225 °C

 Specific Gravity:
 1.096 – 1.190 @ 20°C

 Refractive Index:
 1.533 – 1.538 @ 20°C

 Optical Rotation:
 -10.5 – -0.5 @ 20°C

Methyl Salicylate: >98 %
Acid Value: <1.0

Extraction Method: Steam distillation of the leaves.

Constituents: Methyl salicylate, safrole, linalool, cineole, pinene,

gaultherilene

5. Fire/Explosion Hazard:

Flash Point: >100 °C

Flammable liquid.

6. Reactivity/Stability Data:

Reactivity: Stable at room temperature. Always avoid contact with strong oxidizing agents, alkali and acids. Does not react with water.

Decomposition: Essential oils are naturally high in volatile organic compounds (VOCs).

When heated to decomposition, the smoke from burning essential oils may contain potential carcinogens, such as polycyclic aromatic hydrocarbons (PAHs).

7. Toxicological Properties/Information:

Methyl salicylate is toxic.

It may also be irritating and or sensitizing to some individuals. Dilute before use.

Oral (man), $LD_{50} = 0.10 \text{ g/kg}$

Oral (rat), $LD_{50} = 0.89 \text{ g/kg}$

Avoid use if pregnant and breast feeding.

8. CAUTION:

 LD_{50} of most oils or their main components are 0.5 - 10 g/kg (oral or dermal test).

The internal use of essential oils should be fully avoided during pregnancy; some can be abortifacients in dose 0.5 - 10 ml.

Because of their concentrated nature, essential oils should not be applied directly to the skin in their undiluted or "neat" form. Some can cause severe irritation or provoke an allergic reaction. Instead, essential oil should be applied with a plants oils or other fats (carrier oil), such as olive, hazelnut, or any other "soft" oil. Common ratio of oil disbursed in carrier oil is 0.5 - 5% and depends on its purpose.

Some essential oils are photo-sensitizers, increasing the skin's reaction to sunlight and making it more likely to burn.

If you have sensitive skin, epilepsy, heart or kidney problems, or any serious medical condition, do not use essential oils unless advised by a physician or medical professional that it is safe.

Certain essential oils can be toxic to domestic animals – especially cats.

9. Preventive Data:

Spillage: Absorb spills, cover with an inert, non-combustible, inorganic absorbent material, and remove to an approved disposal container.

Fire: Recommended extinguishing media – CO₂, foam and dry chemicals. DO NOT use direct water jet on

burning material.

Environment: Keep away from drains, surface and ground water.

Storage: Store in cool (ideally 15 - 25 °C), dry, well ventilated area protected in tightly closed container away from sources of ignition, heat and light or direct sunlight. Keep air contact to minimum.

10. First Aid Measures:

Eve contact: Flush with water for at least 15 minutes. Call physician if irritation persists.

Inhalation: Remove to fresh air. Avoid casual breathing.

Ingestion: Rinse mouth and consult a physician immediately. Never-give anything by mouth if victim is

unconscious, is rapidly-losing consciousness, or is convulsing.

Skin contact: Remove contaminated clothing. Wash with soap and plenty of water.

11. Individual Protection for Industrial Use:

Always use a safety goggles.

Handle in a well ventilated area; avoid breathing in vapor directly by using a vapor respirator.

Always avoid skin contact with concentrated product by wearing a lab overall and chemical resistant or surgical gloves.

12. Other Regulatory Information:

WHMIS (Canada):

Class B3 – Combustible liquid with flash point between 37.8°C (100°F) and 93.3°C (200°F).

HMIS (USA):

Health Hazard – 2

Fire Hazard – 2

Reactivity – 0

Personal Protection – H

Risk Phrases:

R₁₀ – Flammable.

R22 – Harmful if swallow.

R36/38 – Irritating to eyes/skin.

13. Preparation Information:

Quality Assurance

New Directions Aromatics Inc.

21-B Regan Road,

Brampton, ON

L7A 1C5, Canada

Date Revised: April 17, 2008

Disclaimer

The information contained in this Certificate of Analysis and Material Safety Data Sheet is obtained from current and reliable sources. As the ordinary or otherwise use(s) of this product is outside the control of New Directions Aromatics Inc., no representation or warranty, expressed or implied is made as to the effect(s) of such use(s) (including damage or injury), or the results obtained.

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CERTIFICATE OF ANALYSIS

Product: Wintergreen Essential Oil

Product No: 11152 Lot No: 11152-A07

(-B07)

		Specifications:	Results:
	Appearance:	Colorless to pale yellow clear liquid.	Complies
Odor:		Characteristic intense sweet woody odor.	

Solubility: Soluble in alcohol and oils. Complies Insoluble in water. **Specific Gravity:** 1.096 – 1.190@ 20°C Complies **Refractive Index:** 1.533 - 1.538 @ 20°C Complies **Optical Rotation:** -10.5 - -0.5 @ 20°C Complies **Methyl Salicylate:** Complies >98 %

CERTIFICATE OF ANALYSIS

Product: Wintergreen Essential Oil

Product No: 11152 Lot No: 11152-A06

	Specifications	:	Results:
Appearance:	Colorless to pale yellow clear liquid.		Complies
Odor:	Characteristic intense sweet woody odor.	Complies	
Solubility:	Soluble in alcohol and oils. Insoluble in water.	Complies	
Specific Gravity:	1.096 – 1.190@ 20°C	Complies	
Refractive Index:	1.533 – 1.537 @ 20°C	Complies	
Optical Rotation:	-10.50.5 @ 20°C	Complies	
Methyl Salicylate:	>98 %	Complies	

CERTIFICATE OF ANALYSIS

Product: Wintergreen Essential Oil

Product No: 11152 Lot No: 11152-B05

	Specifications	:	Results:
Appearance:	Colorless to pale yellow clear liquid.		Complies
Odor:	Characteristic intense sweet woody odor.	Complies	
Solubility:	Soluble in alcohol and oils. Insoluble in water.	Complies	
Specific Gravity:	1.096 – 1.190@ 20°C	Complies	
Refractive Index:	1.533 – 1.537 @ 20°C	Complies	
Optical Rotation:	-10.50.5 @ 20°C	Complies	
Methyl Salicylate:	>98 %	Complies	