



NHR ORGANIC OILS
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Certificate of Analysis & Gas Chromatography **Organic Balsam Fir Essential Oil** *(Abies balsamea)*

Botanical Name: Abies balsamea (L.) Miller
Commercial Name: Organic Fir Balsam
Batch Number: **220626-2**
Geographical Origin: Canada

Physical and Chemical Data:

	Standards	Results of analysis
Appearance	Liquid	Conform
Colour	Colourless to light yellow	Conform
Odour	Fresh, woody, resinous	Conform
Relative Density at 20°C	0.860 to 0.885	0.8710
Refractive Index at 20°C	1.470 to 1.480	1.4749
Flash Point	+35°C to +50°C	

Table of Components:

Components	Contents
Toluene	0.01%
Santene	1.45%
Bornylene	0.01%
Tricyclene	0.77%
Alpha-thujene	0.13%
Alpha-pinene	12.10%
Alpha-fenchene	0.08%
Camphene	5.31%
Thuja-2,4(10)-diene	0.03%
3,7,7-Trimethylcyclohepta-1,3,5-triene	0.04%
Beta-pinene	34.99%
Sabinene	0.21%
Myrcene	1.73%
Alpha-phellandrene	0.32%
Pseudolimonene	0.03%
Delta-3-carene	9.50%
Alpha-terpinene	0.22%

Carvomenthene	0.02%
Para-cymene	0.13%
Limonene	9.29%
Beta-phellandrene	9.39%
E-beta-ocimene	0.02%
Gamma-terpinene	0.27%
Fenchone	0.18%
Isoterpinolene	0.04%
Gamma-campholenal	0.05%
Para-cymenene	0.05%
Terpinolene	0.88%
Linalool	0.16%
Nonanal	0.02%
Endo-fenchol	0.14%
Cis-para-menth-2-en-1-ol	0.04%
Alpha-campholenal	0.04%
Trans-pinocarveol	0.04%
Trans-para-ment-2-en-1-ol	0.03%
Camphor	0.14%
Camphene Hydrate	0.11%
Isoborneol	0.02%
Pinocamphone	0.02%
Myrtenyl Methyl Ether	0.03%
Borneol	0.36%
Alpha-phellandrene-8-ol	0.02%
Isopinocamphone	0.04%
Terpinene-4-ol	0.24%
Cryptone	0.02%
Alpha-terpineol	0.98%
Myrtenal	0.03%
Myrtenol	0.04%
Methylchavicol (Estragole)	0.08%
Verbenone	0.03%
Endo-Fenchyl Acetate	0.08%
Citronellol	0.03%
Cuminal	0.02%
Carvone	0.03%
Piperitone	0.21%
Phellandral	0.03%
Isopulegyl Acetate	0.04%
Bornyl Acetate	7.18%
Isobornyl Acetate	0.04%
Thymol	0.16%
Myrtenyl Acetate	0.03%
Alpha-longipinene	0.07%
Citronellyl Acetate	0.04%
Sativene	0.03%
Geranyl Acetate	0.03%
Beta-longipinene	0.03%

Longifolene	0.28%
Methyleugenol	0.04%
Beta-caryophyllene	0.21%
Trans-alpha-bergamotene	0.04%
Alpha-humulene	0.10%
E-beta-farnesene	0.06%
Beta-selinene	0.03%
Alpha-selinene	0.03%
Alpha-murolene	0.03%
Beta-himachalene	0.02%
Delta-amorphene	0.05%
Gamma-cadinene	0.02%
Beta-bisabolene	0.60%
Delta-cadinene	0.05%
Alpha-calacorene	0.03%
E-alpha-bisabolene	0.08%
E-Nerolidol	0.06%
Caryophyllene Oxide	0.03%
Z-Abienol	0.09%
TOTAL	99.78%