



CERTIFICATE OF ANALYSIS (COA)

Product Information

Parameter	Specification
Product Name	Black Spruce Essential Oil
Botanical Name	<i>Picea mariana</i> (Mill.) Britton, Sterns & Poggenb.
INCI Name	<i>Picea Mariana</i> Leaf Oil
CAS Number	8008-80-8
EC Number	294-420-3
Origin	Canada
Plant Part	Needles and Twigs
Extraction Method	Steam Distillation
Grade	Premium Perfumery Grade
Product Type	Natural Essential Oil

ANALYTICAL SPECIFICATION

Test	Specification	Result
Appearance	Clear mobile liquid	Conforms
Colour	Colourless to Pale Yellow	Conforms
Odour	Fresh, coniferous, woody, balsamic, green	Conforms
Relative Density (20 °C)	0.900–0.930	Conforms
Refractive Index (20 °C)	1.465–1.480	Conforms
Optical Rotation	-35° to -10°	Conforms
Flash Point	48–55 °C	Conforms
Solubility	Soluble in ethanol and perfumery solvents	Conforms
Purity	100% Pure Steam Distilled Essential Oil	Conforms

Typical Naturally Occurring Constituents

Constituent	Status
Bornyl Acetate	Present
α -Pinene	Present
Camphene	Present
β -Pinene	Present
δ -3-Carene	Present



Limonene	Present
Myrcene	Present
β -Phellandrene	Present
Terpinolene	Present
Borneol	Present

Storage

Store tightly closed in a cool, dry place away from direct sunlight, heat, air and oxidising agents.

Shelf Life

36 months from the date of manufacture when stored under recommended conditions.

Conclusion

This material conforms to the above specification.

Prepared By:
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