



candle**science**

Certificate of Analysis

CandleScience
1247 Person St.
Durham, NC 27703

support.candlescience.com
www.candlescience.com

Date Prepared: 2/7/2023
Essential Oil Name: Fir Needle (Siberian)
Lot Number: CS00011
Best Before: 11/7/2023

Characteristic	Specification	Result
Appearance	Liquid	Conforms to
Color	Colorless to Pale Yellow	Conforms to
Odor	Matches Standard	Conforms to
Specific Gravity	0.896 - 0.912	0.901
Refractive Index	1.465 - 1.470	1.468

Storage: Essential oils will last the longest if stored in an airtight container and refrigerated. We recommend refrigerating separately from food to avoid cross-contamination and for increased safety. If refrigeration is not possible, store in airtight containers in a cool, dry place.

No adulterants or diluents were detected. This oil meets the expected profile for this essential oil.

This Certificate of Analysis is valid without a signature



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This Certificate of Analysis does not relieve the purchaser from undertaking their own tests in order to assure the suitability of this product for its application and to comply with all relevant legal requirements for any goods into which this product is incorporated. The values and specifications are valid for the time of analysis.



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Specification Sheet

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Essential Oil Name: Fir Needle (Siberian)

Shelf Life: One year

Characteristic	Specification	Method
Appearance	Liquid	Visual
Color	Colorless to pale yellow	Visual
Odor	Firmenich Standard	Sensory Analysis
Specific Gravity (20°C)	0.899 to 0.915	Hydrometer
Refractive Index (20°C)	1.467 to 1.472	Refractometer
Optical Rotation	-45.0° to -28.0°	Polarimeter

Component	Results	Method
Alpha-pinene	14.99	GC-MS
Camphene	22.62	GC-MS
Delta-3-carene	13.79	GC-MS
Limonene + Beta-phellandrene	7.46	GC-MS
Total terpenes	68.49	GC-MS



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Borneol	1.89	GC-MS
Bornyl acetate	27.59	GC-MS
Caryophyllene	1.0	GC-MS

This oil meets the expected profile for this essential oil.

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