

Client



Source



Fir, Siberian (*Abies sibirica*)  
15-20

Sample

Fir, Siberian (*Abies sibirica*)  
Batch #:..... 15-20  
Type:..... CO2  
CAS Number:... 8021-28-1  
**Natural Sourcing LLC**

Client



Website

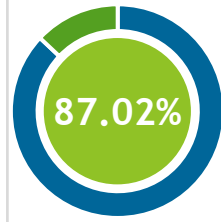
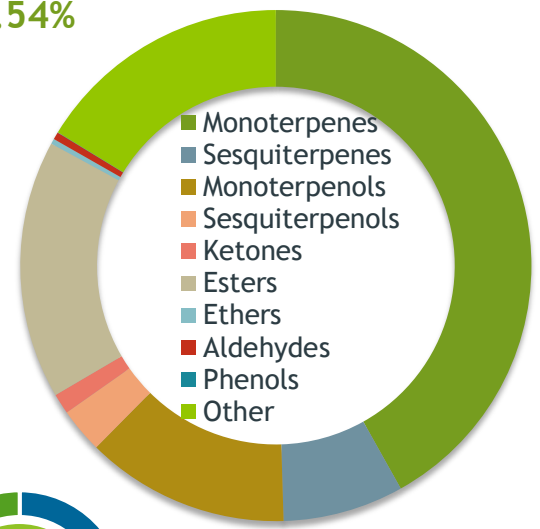


Primary

**14.59%** Bornyl acetate  
**11.83%** Borneol  
**11.07%** Camphene

**Monoterpenes**

39.54%



**Percentage Identified**

Result



Conclusion

No adulterants, diluents, or contaminants were detected via this method. This oil meets the expected profile for genuine CO2 of Fir, Siberian (*Abies sibirica*)

Internal Number: | EVS-4856



**Essential Validation Services**

747 SW 2nd Ave IMB 12 Suite 306  
Gainesville, FL 32601

317.361.5044 | <https://essentialvalidationservices.com/>

*Alan Chastain*

Monoterpenes	39.54%	39.54%
Sesquiterpenes	7.22%	7.22%
Monoterpenols	12.17%	12.17%
Sesquiterpenols	2.69%	2.69%
Ketones	1.22%	1.22%
Esters	15.46%	15.46%
Ethers	0.31%	0.31%
Aldehydes	0.44%	0.44%
Phenols	0.02%	0.02%
Other	15.36%	15.36%

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Client


**NATURAL SOURCING**  
 Cosmetic and Personal Care Ingredient Specialists  
 PROUDLY SERVING YOU FOR OVER 30 YEARS

Source


*Fir, Siberian (Abies sibirica)*

15-20

Total Percentage		87.02%		
Number	RT	Area %	Compound Name	Chemical Family
1	5.61	0.11%	cis-Hex-3-en-1-ol	Aliphatic Alcohol
2	6.03	0.03%	1-Hexanol	Aliphatic Alcohol
3	6.37	0.14%	Santene	Normonoterpene
4	7.72	1.31%	Tricyclene	Monoterpene
5	7.89	0.09%	alpha-Thujene	Monoterpene
6	8.15	6.62%	alpha-Pinene	Monoterpene
7	8.77	11.07%	Camphene	Monoterpene
8	9.69	0.05%	Sabinene	Monoterpene
9	9.85	2.24%	beta-Pinene	Monoterpene
10	10.44	0.47%	Myrcene	Monoterpene
11	11.21	9.03%	delta-3-Carene	Monoterpene
12	11.45	0.01%	Hexyl acetate	Aliphatic Ester
13	11.88	0.08%	para-Cymene	Monoterpene
14	12.12	7.47%	beta-Phellandrene	Monoterpene
15	12.47	0.01%	(Z)-beta-Ocimene	Monoterpene
16	13.40	0.08%	gamma-Terpinene	Monoterpene
17	13.92	0.01%	trans-Sabinene hydrate	Monoterpenol
18	14.46	0.04%	Isoterpinolene	Monoterpene
19	14.62	0.97%	Terpinolene	Monoterpene
20	14.82	0.01%	para-Cymenene	Monoterpene
21	15.35	0.04%	Linalool	Monoterpenol
22	15.57	0.60%	Maltol	Monoterpene Ketone
23	17.08	0.02%	trans-Pinocarveol	Monoterpenol
24	17.32	0.55%	Camphor	Monoterpene Ketone
25	17.71	0.01%	Camphene hydrate	Monoterpenol
26	18.15	0.02%	para-Mentha-1,5-dien-8-ol	Monoterpenol
27	18.60	11.83%	Borneol	Monoterpenol
28	18.95	0.02%	Terpinen-4-ol	Monoterpenol
29	19.19	0.01%	Cryptone	Monoterpene Ketone
30	19.28	0.04%	para-Cymen-8-ol	Monoterpenol
31	19.63	0.02%	alpha-Terpineol	Monoterpenol
32	20.12	0.01%	Verbenone	Monoterpene Ketone
33	20.67	0.01%	Fenchyl acetate	Monoterpene Ester
34	21.10	0.11%	Bornyl formate	Monoterpene Ester
35	21.27	0.08%	Methyl thymol	Monoterpene Ether

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Number	RT	Area %	Compound Name	Chemical Family
36	21.82	0.02%	Carvone	Monoterpene Ether
37	22.25	0.08%	Geraniol	Monoterpenol
38	23.71	14.59%	Bornyl acetate	Monoterpene Ester
39	24.13	0.03%	2-Undecanone	Aliphatic Ketone
40	25.00	0.02%	Menthyl acetate	Monoterpene Ester
41	26.44	0.08%	alpha-Longipinene	Sesquiterpene
42	26.61	0.02%	Eugenol	Phenylpropanoid
43	27.00	0.02%	Neryl acetate	Monoterpene Ester
44	27.32	0.06%	alpha-Ylangene	Sesquiterpene
45	27.60	0.01%	alpha-Copaene	Sesquiterpene
46	27.84	0.15%	Geranyl acetate	Monoterpene Ester
47	28.22	0.04%	Sativene	Sesquiterpene
48	28.49	0.01%	1-Undecanol	Monoterpenol
49	28.72	0.14%	Sibirene	Sesquiterpene
50	28.91	0.28%	Longifolene	Sesquiterpene
51	29.06	0.06%	Acora-3,7(14)-diene	Sesquiterpene
52	29.15	0.29%	Dodecanal	Aliphatic Aldehyde
53	29.39	2.73%	beta-Caryophyllene	Sesquiterpene
54	30.61	0.12%	alpha-Himachalene	Sesquiterpene
55	30.85	1.46%	alpha-Humulene	Sesquiterpene
56	31.87	0.07%	1-Dodecanol	Monoterpenol
57	31.98	0.26%	gamma-Himachalene	Sesquiterpene
58	32.21	0.04%	beta-Selinene	Sesquiterpene
59	32.50	0.16%	beta-Alaskene	Sesquiterpene
60	32.84	0.08%	cis-alpha-Bisabolene	Sesquiterpene
61	33.11	0.90%	beta-Bisabolene	Sesquiterpene
62	33.20	0.24%	beta-Himachalene	Sesquiterpene
63	33.32	0.05%	epi-Cubebol	Sesquiterpenol
64	33.48	0.04%	beta-Cadinene	Sesquiterpene
65	33.84	0.45%	trans-gamma-Bisabolene	Sesquiterpene
66	34.40	0.07%	trans-alpha-Bisabolene	Sesquiterpene
67	35.21	0.14%	(E)-Nerolidol	Sesquiterpenol
68	35.82	0.16%	Caryophyllene oxide	Sesquiterpene Ether
69	36.55	0.07%	Longiborneol	Sesquiterpenol
70	36.71	0.03%	(E)-2-Tridecenal	Sesquiterpene Aldehyde
71	36.89	0.07%	Humulene epoxide II	Sesquiterpene Ether

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