

Client



Source



Palo Santo (*Bursera graveolens*)
17-7317.0421PIU110F

Sample

Palo Santo (*Bursera graveolens*)
Batch #:..... 17-7317.0421PIU110F
Type:..... Essential Oil
CAS Number:... 959130-05-3
Natural Sourcing LLC

Client



Website

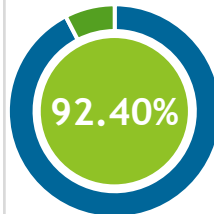
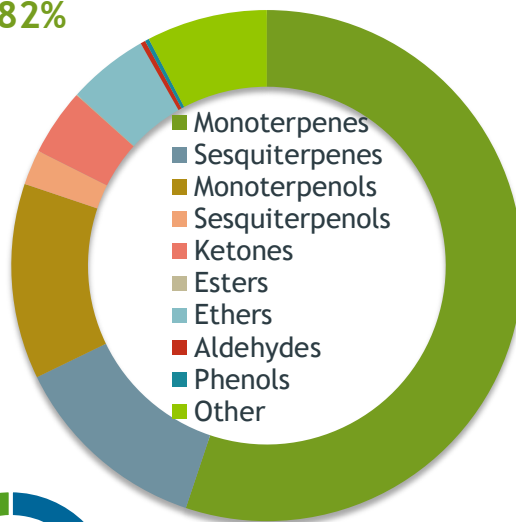


Primary

50.34% | Limonene
8.91% | alpha-Terpineol
5.11% | beta-Bisabolene

Monoterpenes

54.82%



Percentage Identified

Result



Conclusion

No adulterants, diluents, or contaminants were detected via this method. This oil meets the expected profile for genuine Essential Oil of Palo Santo (*Bursera graveolens*)

Internal Number: | EVS-4934



Essential Validation Services

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

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

Alan Christen

Monoterpenes	54.82%	54.82%
Sesquiterpenes	12.60%	12.60%
Monoterpenols	12.30%	12.30%
Sesquiterpenols		2.21%
Ketones	4.20%	4.20%
Esters		0.05%
Ethers	5.08%	5.08%
Aldehydes		0.31%
Phenols		0.26%
Other	7.60%	7.60%

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

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Palo Santo (Bursera graveolens)

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Total Percentage		92.40%		
Number	RT	Area %	Compound Name	Chemical Family
1	3.63	0.01%	2,4-Dimethyl-3-pentanone	Aliphatic Ketone
2	5.28	0.13%	(E)-2-Hexenal	Aliphatic Aldehyde
3	7.99	0.12%	alpha-Pinene	Monoterpene
4	8.43	0.03%	beta-Citronellene	Monoterpene
5	8.70	0.08%	3-Methyl cyclohexanone	Aliphatic Ketone
6	9.39	0.07%	2-Heptenal	Aliphatic Aldehyde
7	9.69	0.01%	beta-Pinene	Monoterpene
8	10.08	0.35%	6-Methyl-5-hepten-2-one	Aliphatic Ketone
9	10.24	0.29%	Dehydro-1,8-cineole	Monoterpene Ether
10	10.64	0.20%	3-p-Menthene	Monoterpene
11	10.88	0.28%	alpha-Phellandrene	Monoterpene
12	11.40	0.01%	alpha-Terpinene	Monoterpene
13	11.76	3.38%	para-Cymene	Monoterpene
14	12.11	50.34%	Limonene	Monoterpene
15	13.23	0.01%	gamma-Terpinene	Monoterpene
16	14.08	0.01%	para-Cresol	Phenol
17	14.44	0.02%	Terpinolene	Monoterpene
18	14.51	0.02%	cis-Linalool oxide (5) (furanoid)	Monoterpenol
19	14.65	0.38%	para-Cymenene	Monoterpene
20	15.08	0.01%	Perillene	Monoterpene Ether
21	15.17	0.11%	Linalool	Monoterpenol
22	15.29	0.01%	6-Methyl-3,5-heptadien-2-one	Monoterpene Ketone
23	15.66	0.04%	1,3,8-para-Menthatriene	Monoterpene
24	16.09	0.41%	cis-para-Mentha-2,8-dien-1-ol	Monoterpenol
25	16.57	0.05%	cis-Limonene oxide	Monoterpene Ether
26	16.77	0.49%	trans-para-Mentha-2,8-dien-1-ol	Monoterpenol
27	17.15	0.01%	Camphor	Monoterpene Ketone
28	17.28	0.03%	neo-Isopulegol	Monoterpenol
29	17.36	0.39%	cis-beta-Terpineol	Monoterpenol
30	17.62	0.77%	Isomenthone	Monoterpene Ketone
31	17.72	0.03%	Isopulegol	Monoterpenol
32	18.00	4.57%	Menthofuran	Monoterpene Ether
33	18.21	0.09%	beta-Terpineol	Monoterpenol
34	18.30	0.04%	delta-Terpineol	Monoterpenol
35	18.38	0.04%	para-Mentha-1,5-dien-8-ol	Monoterpenol

ESSENTIAL VALIDATION SERVICES | 747 SW 2ND AVE GAINESVILLE, FLORIDA 32601 | 317-361-5044

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Palo Santo (*Bursera graveolens*)

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Number	RT	Area %	Compound Name	Chemical Family
36	18.518	0.04%	(Z)-isocitral	Monoterpenol
37	18.69	1.09%	6,7-Dihydrogeraniol	
38	18.93	0.25%	para-Methylacetophenone	Simple Phenolic
39	19.34	0.08%	Menthol	Monoterpenol
40	19.54	8.91%	alpha-Terpineol	Monoterpenol
41	19.84	0.11%	cis-Dihydrocarvone	Monoterpene Ketone
42	20.58	1.12%	trans-Carveol	Monoterpenol
43	21.03	0.04%	cis-para-Mentha-1(7),8-dien-2-ol	Monoterpenol
44	21.09	0.14%	Methyl thymol	Monoterpene Ether
45	21.17	0.45%	cis-Carveol	Monoterpenol
46	21.36	0.70%	Pulegone	Monoterpene Ketone
47	21.64	2.13%	Carvone	Monoterpene Ketone
48	22.93	0.03%	neo-Isopulegyl acetate	Monoterpene Ester
49	23.01	0.07%	Perilla aldehyde	Monoterpene Aldehyde
50	23.94	0.03%	2-Undecanone	Aliphatic Ketone
51	24.14	0.05%	Perillyl alcohol	Monoterpenol
52	25.70	0.52%	delta-Elemene	Sesquiterpene
53	26.75	0.02%	trans-Caryyl acetate	Monoterpene Ester
54	27.12	0.37%	alpha-Cubebene	Sesquiterpene
55	27.40	0.39%	alpha-Copaene	Sesquiterpene
56	27.71	0.04%	alpha-Ylangene	Sesquiterpene
57	28.02	1.06%	beta-Elemene	Sesquiterpene
58	28.42	0.02%	alpha-Chamipinene	Sesquiterpene
59	29.02	0.09%	alpha-Cedrene	Sesquiterpene
60	29.16	0.17%	beta-Cubebene	Sesquiterpene
61	29.33	0.05%	beta-Cedrene	Sesquiterpene
62	29.63	0.25%	Sibirene	Sesquiterpene
63	29.78	0.05%	Thujopsene	Sesquiterpene
64	29.86	0.08%	trans-alpha-Bergamotene	Sesquiterpene
65	29.96	0.02%	beta-Caryophyllene	Sesquiterpene
66	30.16	0.57%	beta-Humulene	0.00
67	30.29	0.14%	beta-Barbatene	Sesquiterpene
68	30.44	0.83%	Aromadendrene	Sesquiterpene
69	30.65	0.03%	gamma-Elemene	Sesquiterpene
70	30.76	0.10%	(E)-beta-Farnesene	Sesquiterpene
71	31.12	0.04%	allo-Aromadendrene	Sesquiterpene

ESSENTIAL VALIDATION SERVICES | 74 / SW 2ND AVE GAINESVILLE, FLORIDA 32601 | 351-7-301-3044

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