

Client



Source



Pepper, Black (*Piper nigrum*)
MA-59213

Sample

Pepper, Black (*Piper nigrum*)
Batch #:..... MA-59213
Type:..... Essential Oil
CAS Number:... 8006-82-4
Nature's Gift

Client



Website

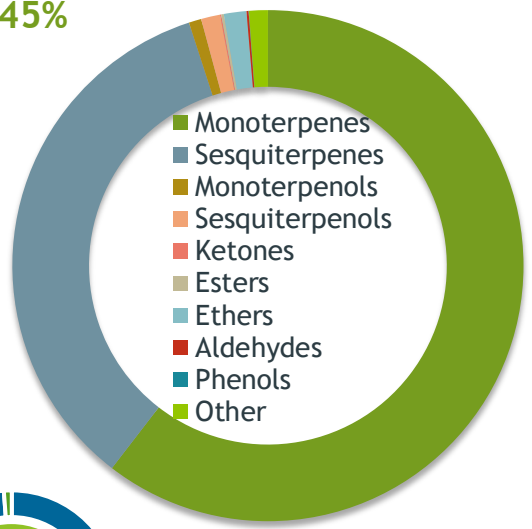


Primary

19.21% | beta-Caryophyllene
16.93% | Limonene
12.07% | alpha-Pinene

Monoterpenes

60.45%



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 Pepper, Black (*Piper nigrum*)

Internal Number: | EVS-4729



Essential Validation Services

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

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

Alan Christen

Monoterpenes	60.45%	60.45%
Sesquiterpenes	34.55%	34.55%
Monoterpenols		0.79%
Sesquiterpenols		1.20%
Ketones		0.08%
Esters		0.16%
Ethers		1.43%
Aldehydes		0.13%
Phenols		0.02%
Other		1.19%

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Total Percentage		98.81%		
Number	RT	Area %	Compound Name	Chemical Family
1	7.72	0.01%	Tricyclene	Monoterpene
2	7.89	0.10%	alpha-Thujene	Monoterpene
3	8.16	12.07%	alpha-Pinene	Monoterpene
4	8.74	0.53%	Camphene	Monoterpene
5	9.69	0.35%	Sabinene	Monoterpene
6	9.87	12.03%	beta-Pinene	Monoterpene
7	10.44	1.87%	Myrcene	Monoterpene
8	10.98	0.03%	Pseudolimonene	Monoterpene
9	11.09	2.49%	alpha-Phellandrene	Monoterpene
10	11.22	11.96%	delta-3-Carene	Monoterpene
11	11.55	0.04%	alpha-Terpinene	Monoterpene
12	11.68	0.06%	o-Cymene	Monoterpene
13	11.89	0.86%	para-Cymene	Monoterpene
14	12.14	16.93%	Limonene	Monoterpene
15	12.47	0.04%	(Z)-beta-Ocimene	Monoterpene
16	12.92	0.19%	(E)-beta-Ocimene	Monoterpene
17	13.39	0.09%	gamma-Terpinene	Monoterpene
18	13.91	0.01%	trans-Sabinene hydrate	Monoterpenol
19	14.45	0.21%	Isoterpinolene	Monoterpene
20	14.62	0.57%	Terpinolene	Monoterpene
21	15.34	0.34%	Linalool	Monoterpenol
22	15.64	0.02%	alpha-Pinene oxide	Monoterpene Ether
23	16.94	0.02%	trans-para-Mentha-2,8-dien-1-ol	Monoterpenol
24	17.07	0.05%	trans-Pinocarveol	Monoterpenol
25	17.33	0.05%	Camphor	Monoterpene Ketone
26	18.15	0.01%	para-Mentha-1,5-dien-8-ol	Monoterpenol
27	18.94	0.03%	Terpinen-4-ol	Monoterpenol
28	19.28	0.04%	para-Cymen-8-ol	Monoterpenol
29	19.63	0.25%	alpha-Terpineol	Monoterpenol
30	20.02	0.13%	(E)-Isocitral	Monoterpene Aldehyde
31	20.74	0.03%	trans-Carveol	Monoterpenol
32	21.34	0.01%	cis-Carveol	Monoterpenol
33	21.53	0.02%	beta-Cyclocitral	Monoterpene
34	21.82	0.02%	Carvone	Monoterpene Ketone
35	22.24	0.01%	Piperitone	Monoterpene Ketone

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Number	RT	Area %	Compound Name	Chemical Family
36	23.654	0.01%	Bornyl acetate	Monoterpene Ketone
37	25.90	2.69%	delta-Elemene	Sesquiterpene
38	26.40	0.11%	alpha-Cubebene	Sesquiterpene
39	26.61	0.02%	Eugenol	Phenylpropanoid
40	27.29	0.46%	alpha-Ylangene	Sesquiterpene
41	27.59	0.19%	alpha-Copaene	Sesquiterpene
42	27.90	0.09%	Longicyclene	Sesquiterpene
43	28.22	1.75%	beta-Elemene	Sesquiterpene
44	28.91	0.14%	alpha-Gurjunene	Sesquiterpene
45	29.47	19.21%	beta-Caryophyllene	Sesquiterpene
46	29.88	0.33%	gamma-Elemene	Sesquiterpene
47	30.11	0.51%	alpha-Guaiene	Sesquiterpene
48	30.35	0.02%	6,9-Guaiadiene	Sesquiterpene
49	30.42	0.03%	beta-Copaene	Sesquiterpene
50	30.86	1.85%	alpha-Humulene	Sesquiterpene
51	31.13	0.05%	trans-Muurola-3,5-diene	Sesquiterpene
52	31.32	0.04%	(E)-beta-Farnesene	Sesquiterpene
53	31.58	0.03%	gamma-Gurjunene	Sesquiterpene
54	31.74	0.10%	gamma-Muurolene	Sesquiterpene
55	31.93	2.38%	Germacrene D	Sesquiterpene
56	32.04	0.05%	gamma-Selinene	Sesquiterpene
57	32.23	2.27%	beta-Selinene	Sesquiterpene
58	32.36	0.09%	Viridiflorene	Sesquiterpene
59	32.53	1.60%	alpha-Selinene	Sesquiterpene
60	32.69	0.04%	alpha-Muurolene	Sesquiterpene
61	32.80	0.09%	gamma-Himachalene	Sesquiterpene
62	33.03	0.06%	(E,E)-alpha-Farnesene	Sesquiterpene
63	33.11	0.07%	beta-Bisabolene	Sesquiterpene
64	33.23	0.04%	gamma-Cadinene	Sesquiterpene
65	33.32	0.02%	Cubebol	Sesquiterpenol
66	33.47	0.21%	beta-Cadinene	Sesquiterpene
67	34.31	0.01%	gamma-Calacorene	Sesquiterpene
68	34.65	0.12%	Elemol	Sesquiterpenol
69	34.95	0.04%	Germacrene B	Sesquiterpene
70	35.66	0.07%	Spathulenol	Sesquiterpenol
71	35.83	1.33%	Caryophyllene oxide	Sesquiterpene Ether

