



316 Old Hickory Blvd East, Madison, TN 37115

tel (615)612-4270 fax (615)860-9171

sold@naturesgift.com

Healing Body, Mind and Spirit with Pure Essential Oils

Since 1995

Black Pepper

Piper nigrum

Madagascar

Batch #MG-59360

Monoterpenes 63.46%

limonene	17.93
α pinene	14.32
δ 3 carene	12.94
β pinene	12.61
myrcene	1.78
α phellandrene	1.22
para cymene	1.16
camphene	0.51
terpinolene	0.31
sabinene	0.21
isoterpinolene	0.14
(E) β ocimene	0.10
γ terpinene	0.09
α thujene	0.07
(Z) β ocimene	0.03
α terpinene	0.02
pseudolimonene	0.02

Ethers 3.22%

caryophyllene oxide	2.99
humulene epoxide II	0.19
(Z) limonene oxide	0.02
α pinene oxide	0.02

Aldehydes 0.03%

(E) isocitral	0.03
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Phenols 0.01%

toluene	0.01
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Monoterpenols 0.83%

linalool	0.27
α terpineol	0.19
(Z) 2,3-pinenediol	0.11
trans-pinocarveol	0.08
para-menth-1,5-dien-8-ol	0.08
para-cymen-8-ol	0.05
trans-carveol	0.05
(E) para-menth-2-en-1-ol	0.04
terpinen-4-ol	0.03
(Z)para-mentha-2,8-dien-1-ol	0.03
cis-carveol	0.02

Ketones 0.07%

camphor	0.06
carvone	0.01
car-3-en-2-one	0.02

Esters 0.89%

neryl acetate	0.89
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Sesquiterpenols 1.39%

isospathulenol	0.70
elemol	0.20
longifolol	0.10
guaiol	0.10
spathulenol	0.08
Caryophylla-4(12),8(13)-dien-5-beta-ol	0.08
α 11-selinol-4	0.05
longiborneol	0.04
α germacra-4(15),5,10(14)-trien-1-ol	0.02
τ muurolol	0.02

Sesquiterpenes 27.52%

δ elemene	1.78
β caryophyllene	15.76
β selinene	2.21
α selinene	1.44
α humulene	1.38
β elemene	1.34
germacrene d	1.28
α guaiane	0.49
α ylangene	0.30
δ cadinene	0.23
γ elemene	0.20
α copaene	0.18
α bulnesene	0.16
γ muurolene	0.14
α cubebene	0.10
α gurjunene	0.09
viridiflorene	0.09
β bisabolene	0.07
α muurolene	0.07
germacrene B	0.06
γ gurjunene	0.05
γ cadinene	0.03
α patchoulene	0.03
seychellene	0.02
(E) calamenene	0.02

Other 0.04%

1-tetradecene	0.04
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Date of Analysis: 10/23/2023

Client



Source



Black Pepper (*Piper nigrum*)
MG-59360 - Madagascar

Sample

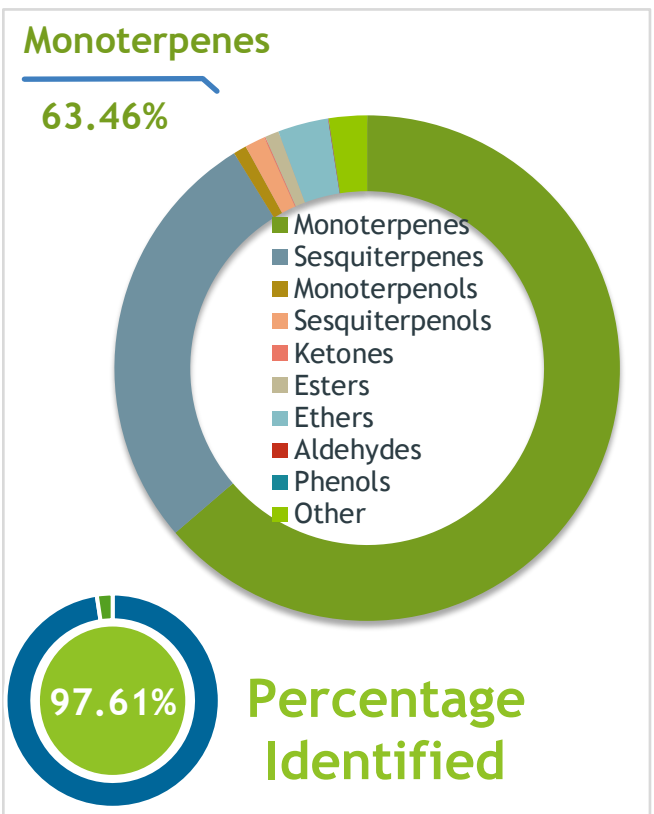
Black Pepper (*Piper nigrum*)
 Identification #: MG-59360
 Type:..... Essential Oil
 CAS Number:... 8006-82-4
Nature's Gift

Properties

Country Of Origin | Madagascar
 Specific Gravity | NT
 Refractive Index | NT

Primary

17.93% | Limonene
15.76% | beta-Caryophyllene
14.32% | alpha-Pinene



Result



10/23/2023

Conclusion

No adulterants, diluents, or contaminants were detected via this method. This oil meets the expected profile for genuine Essential Oil of Black Pepper (*Piper nigrum*)

Internal Number: | EVS-5869



Essential Validation Services

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

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



Monoterpenes	63.46%	63.46
Sesquiterpenes	27.36%	27.36
Monoterpenols	0.84%	0.84
Sesquiterpenols	1.30%	1.30
Ketones	0.07%	0.07
Esters	0.89%	0.89
Ethers	3.22%	3.22
Aldehydes	0.03%	0.03
Phenols	0.01%	0.01
Other	2.43%	2.43

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Client



Source

Black Pepper (*Piper nigrum*)

MG-59360

Total Percentage		97.61%		
Number	RT	Area %	Compound Name	Chemical Family
1	3.67	0.01%	Toluene	Simple Phenolic
2	8.10	0.07%	alpha-Thujene	Monoterpene
3	8.36	14.32%	alpha-Pinene	Monoterpene
4	8.96	0.51%	Camphene	Monoterpene
5	9.92	0.21%	Sabinene	Monoterpene
6	10.09	12.61%	beta-Pinene	Monoterpene
7	10.66	1.78%	Myrcene	Monoterpene
8	11.21	0.02%	Pseudolimonene	Monoterpene
9	11.32	1.22%	alpha-Phellandrene	Monoterpene
10	11.44	12.94%	delta-3-Carene	Monoterpene
11	11.78	0.02%	alpha-Terpinene	Monoterpene
12	12.12	1.16%	para-Cymene	Monoterpene
13	12.36	17.93%	Limonene	Monoterpene
14	12.70	0.03%	(Z)-beta-Ocimene	Monoterpene
15	13.16	0.10%	(E)-beta-Ocimene	Monoterpene
16	13.63	0.09%	gamma-Terpinene	Monoterpene
17	14.69	0.14%	Isoterpinolene	Monoterpene
18	14.85	0.31%	Terpinolene	Monoterpene
19	15.41	0.02%	alpha-Pinene oxide	Monoterpene Ether
20	15.58	0.27%	Linalool	Monoterpenol
21	15.89	0.04%	trans-para-Mentha-2,8-dien-1-ol	Monoterpenol
22	16.99	0.02%	cis-Limonene oxide	Monoterpene Ether
23	17.20	0.03%	cis-para-Mentha-2,8-dien-1-ol	Monoterpenol
24	17.32	0.08%	trans-Pinocarveol	Monoterpenol
25	17.58	0.06%	Camphor	Monoterpene Ketone
26	18.39	0.08%	para-Mentha-1,5-dien-8-ol	Monoterpenol
27	19.18	0.03%	Terpinen-4-ol	Monoterpenol
28	19.53	0.05%	para-Cymen-8-ol	Monoterpenol
29	19.62	0.03%	(E)-Isocitral	Monoterpene Aldehyde
30	19.88	0.19%	alpha-Terpineol	Monoterpenol
31	20.99	0.05%	trans-Carveol	Monoterpenol
32	21.59	0.02%	cis-Carveol	Monoterpenol
33	22.06	0.01%	Carvone	Monoterpene Ketone
34	22.18	0.02%	17.75 Car-3-en-2-one	0.00
35	25.45	0.11%	21.01 Pinanediol<cis-2,3->	0.00

Client



Source



Black Pepper (Piper nigrum)
MG-59360

Number	RT	Area %	Compound Name	Chemical Family
36	26.101	1.78%	delta-Elemene	0.00
37	26.61	0.10%	alpha-Cubebene	Sesquiterpene
38	27.20	0.89%	Neryl acetate	Monoterpene Ester
39	27.50	0.30%	alpha-Ylangene	Sesquiterpene
40	27.80	0.18%	alpha-Copaene	Sesquiterpene
41	28.42	1.34%	beta-Elemene	Sesquiterpene
42	28.69	0.04%	1-Tetradecene	Alkene
43	29.11	0.09%	alpha-Gurjunene	Sesquiterpene
44	29.64	15.76%	beta-Caryophyllene	Sesquiterpene
45	30.07	0.20%	gamma-Elemene	Sesquiterpene
46	30.30	0.49%	alpha-Guaiene	Sesquiterpene
47	30.72	0.02%	Seychellene	Sesquiterpene
48	31.06	1.38%	alpha-Humulene	Sesquiterpene
49	31.24	0.03%	alpha-Patchoulene	Sesquiterpene
50	31.78	0.05%	gamma-Gurjunene	Sesquiterpene
51	31.92	0.14%	gamma-Murolene	Sesquiterpene
52	32.12	1.28%	Germacrene D	Sesquiterpene
53	32.43	2.21%	beta-Selinene	Sesquiterpene
54	32.55	0.09%	Viridiflorene	Sesquiterpene
55	32.73	1.44%	alpha-Selinene	Sesquiterpene
56	32.88	0.07%	alpha-Murolene	Sesquiterpene
57	32.99	0.16%	29.20 Bulnesene<alpha->	0.00
58	33.30	0.07%	beta-Bisabolene	Sesquiterpene
59	33.43	0.03%	gamma-Cadinene	Sesquiterpene
60	33.66	0.23%	delta-Cadinene	Sesquiterpene
61	33.75	0.02%	trans-Calamenene	Sesquiterpene
62	34.84	0.20%	Elemol	Sesquiterpenol
63	35.14	0.06%	Germacrene B	Sesquiterpene
64	36.03	2.99%	Caryophyllene oxide	Sesquiterpene Ether
65	36.42	0.08%	Spathulenol	Sesquiterpenol
66	36.92	0.04%	Longiborneol	Sesquiterpenol
67	37.08	0.19%	Humulene epoxide II	Sesquiterpene Ether
68	37.39	0.10%	Guaiol	Sesquiterpenol
69	37.85	0.70%	Isospathulenol	Sesquiterpenol
70	38.13	0.08%	34.40 Caryophylla-4(12),8(13)-dien5-beta-ol	0.00

