

Juniper Berry Juniperus communis

Batch No. BU-59121

Bulgaria

Monoterpenes 54.56%

α pinene	25.33
myrcene	14.45
sabinene	4.96
limonene	4.59
β pinene	2.10
terpinolene	0.75
α thujene	0.53
Δ 3 carene	0.49
γ terpinene	0.34
para cymene	0.25
camphene	0.24
α terpinene	0.19
tricyclene	0.10
(Z) β ocimene	0.06
α phellandrene	0.05
α fenchene	0.04
para cymenene	0.03
thuja-2,4(10)-diene	0.02
(E) β ocimene	0.02
hashishene	0.01
verbenene	0.01

Monoterpenols 1.11%

terpinen-4-ol	0.52
linalool	0.13
α terpineol	0.12
trans-verbenol	0.06
(E) sabinene hydrate	0.05
trans pinocarveol	0.05
citronellol	0.05
borneol	0.04
para-cymen-8-ol	0.04
(E) para-menth-2-en-1-ol	0.03
(Z) para-menth-2-en-1-ol	0.02

Aldehydes 0.12%

α campholene aldehyde	0.04
citronellal	0.03
pentadecanal	0.02
hexanal	0.01
(E)-2-hexenal	0.01
nonanal	0.01

Sesquiterpenes 38.25%

germacrene D	9.18
γ elemene	4.46
β elemene	3.79
β caryophyllene	3.71
δ cadinene	2.9
α humulene	2.62
(E) β farnesene	1.63
γ cadinene	1.47
bicyclogermacrene	1.15
α muurolene	0.92
germacrene B	0.76
γ muurolene	0.73
sibirene	0.67
α copaene	0.62
β selinene	0.58
α cubebene	0.56
δ elemene	0.36
α cadinene	0.34
cis-muurola-4(14_5 diene	0.24
1-epi-bicylosesquiphellandrene	0.22
trans-cadina-1(6),4 diene	0.19
allo-aromadendrene	0.18
isocaryophyllene	0.15
trans-cadina-1,4-diene	0.15
selina-3,7(11)-diene	0.12
β bisabolene	0.11
δ amorphene	0.09
trans-muurola-3-5-diene	0.08
aromadendrene	0.06
longifolene	0.06
(E) α bergamotene	0.06
α ylangene	0.05
α longipene	0.04

Ketones 0.14%

2-undecanone	0.10
verbenone	0.02
junipercamphor	0.02

Phenols 0.03%

methyl carvacrol	0.03
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Sesquiterpenols 1.78%

α cadinol	0.59
germacrene D-4-ol	0.57
τ cadinol	0.33
1,10-di-epi-cubenol	0.29
τ muurolol	0.28
(E) nerolidol	0.15
α muurolol	0.10
elemol	0.09
viridifloral	0.09
(Z) nerolidol	0.04
globulol	0.04
γ eudesmol	0.04
junenol	0.02

Esters 0.39%

bornyl acetate	0.39
fenchyl acetate	0.02
methyl citronellate	0.20
citronellyl acetate	0.10
neryl acetate	0.01
allo-aromadendrene epoxide	0.16

Ethers 0.23%

caryophyllene oxyde	0.23
6,7 epoxy myrcene	0.01
α pinene oxide	0.05
myrtenyl acetate	0.08
humulene epoxide II	0.12

Other 0.14%

1-octanol	0.01
sclarene	0.05
abietatriene	0.04
abietadiene	0.03
totalol	0.01

Client



Source



Juniper berry (*Juniperus communis*)
BU-59121

Sample

Juniper berry (*Juniperus communis*)
Batch #:..... BU-59121
Type:..... Essential Oil
CAS Number:... 8012-91-7
Nature's Gift

Client



Website

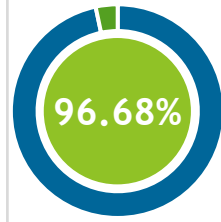
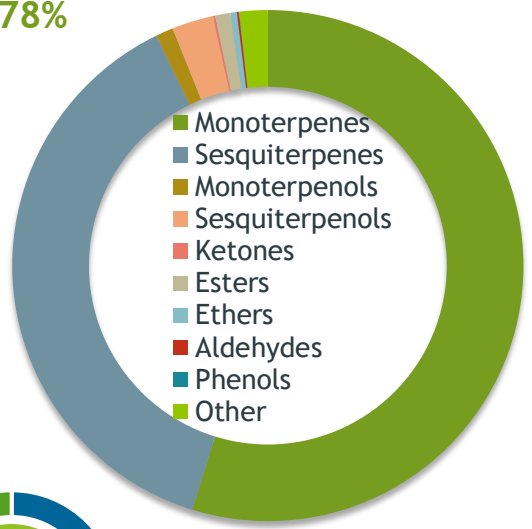


Primary

25.33% | alpha-Pinene
14.45 | Myrcene
9.18% | Germacrene D

Monoterpenes

54.78%



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 Juniper berry (*Juniperus communis*)

Internal Number: | EVS-4115



Essential Validation Services

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

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

Alan Christen

Monoterpenes	54.78%	54.78%
Sesquiterpenes	38.03%	38.03%
Monoterpenols		1.11%
Sesquiterpenols		2.63%
Ketones		0.14%
Esters		0.96%
Ethers		0.41%
Aldehydes		0.12%
Phenols		0.03%
Other		1.79%

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

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Total Percentage		96.68%		
Number	RT	Area %	Compound Name	Chemical Family
1	4.28	0.01%	Hexanal	Aliphatic Aldehyde
2	5.65	0.01%	(E)-2-Hexenal	Aliphatic Aldehyde
3	7.54	0.01%	Hashishene	Monoterpene
4	7.86	0.10%	Tricyclene	Monoterpene
5	8.03	0.53%	alpha-Thujene	Monoterpene
6	8.34	25.33%	alpha-Pinene	Monoterpene
7	8.83	0.04%	alpha-Fenchene	Monoterpene
8	8.89	0.24%	Camphene	Monoterpene
9	9.06	0.02%	Thuja-2,4(10)-diene	Monoterpene
10	9.45	0.01%	Verbenene	Monoterpene
11	9.85	4.96%	Sabinene	Monoterpene
12	10.01	2.10%	beta-Pinene	Monoterpene
13	10.63	14.45%	Myrcene	Monoterpene
14	11.24	0.05%	alpha-Phellandrene	Monoterpene
15	11.34	0.49%	delta-3-Carene	Monoterpene
16	11.71	0.19%	alpha-Terpinene	Monoterpene
17	12.04	0.25%	para-Cymene	Monoterpene
18	12.26	4.59%	Limonene	Monoterpene
19	12.63	0.06%	(Z)-beta-Ocimene	Monoterpene
20	13.09	0.02%	(E)-beta-Ocimene	Monoterpene
21	13.56	0.34%	gamma-Terpinene	Monoterpene
22	14.08	0.05%	trans-Sabinene hydrate	Monoterpenol
23	14.79	0.75%	Terpinolene	Monoterpene
24	14.99	0.03%	para-Cymenene	Monoterpene
25	15.10	0.01%	6,7-Epoxymenthene	Monoterpene Ether
26	15.18	0.01%	1-Octanol	Aliphatic Alcohol
27	15.51	0.13%	Linalool	Monoterpenol
28	15.73	0.01%	Nonanal	Aliphatic Aldehyde
29	15.82	0.05%	alpha-Pinene oxide	Monoterpene Ether
30	16.56	0.02%	cis-para-Menth-2-en-1-ol	Monoterpenol
31	16.65	0.04%	alpha-Campholene aldehyde	Monoterpene Aldehyde
32	17.26	0.05%	trans-Pinocarveol	Monoterpenol
33	17.37	0.03%	trans-para-Menth-2-en-1-ol	Monoterpenol
34	17.53	0.06%	trans-Verbenol	Monoterpenol
35	17.91	0.03%	Citronellal	Monoterpene Aldehyde

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Number	RT	Area %	Compound Name	Chemical Family
36	18.711	0.04%	Borneol	Monoterpene Aldehyde
37	19.12	0.52%	Terpinen-4-ol	Monoterpenol
38	19.45	0.04%	para-Cymen-8-ol	Monoterpenol
39	19.82	0.12%	alpha-Terpineol	Monoterpenol
40	20.31	0.02%	Verbenone	Monoterpene Ketone
41	20.85	0.02%	Fenchyl acetate	Monoterpene Ester
42	21.37	0.05%	Citronellol	Monoterpenol
43	21.85	0.03%	Methyl carvacrol	Phenylpropanoid
44	22.77	0.20%	Methyl citronellate	Monoterpene Ester
45	23.84	0.39%	Bornyl acetate	Monoterpene Ester
46	24.32	0.10%	2-Undecanone	Aliphatic Ketone
47	25.56	0.08%	Myrtenyl acetate	Monoterpene Ester
48	25.94	0.36%	delta-Elemene	Sesquiterpene
49	26.60	0.56%	alpha-Cubebene	Sesquiterpene
50	26.81	0.10%	Citronellyl acetate	Monoterpene Ester
51	27.13	0.04%	alpha-Longipinene	Sesquiterpene
52	27.20	0.01%	Neryl acetate	Monoterpene Ester
53	27.52	0.05%	alpha-Ylangene	Sesquiterpene
54	27.80	0.62%	alpha-Copaene	Sesquiterpene
55	28.44	3.79%	beta-Elemene	Sesquiterpene
56	28.93	0.67%	Sibirene	Sesquiterpene
57	29.13	0.06%	Longifolene	Sesquiterpene
58	29.61	3.71%	beta-Caryophyllene	Sesquiterpene
59	29.73	0.15%	Isocaryophyllene	Sesquiterpene
60	30.11	4.46%	gamma-Elemene	Sesquiterpene
61	30.26	0.06%	trans-alpha-Bergamotene	Sesquiterpene
62	30.38	0.06%	Aromadendrene	Sesquiterpene
63	30.83	0.08%	trans-Muurola-3,5-diene	Sesquiterpene
64	30.90	0.18%	allo-Aromadendrene	Sesquiterpene
65	31.08	2.62%	alpha-Humulene	Sesquiterpene
66	31.17	1.63%	(E)-beta-Farnesene	Sesquiterpene
67	31.35	0.24%	cis-Muurola-4(14),5-diene	Sesquiterpene
68	31.82	0.19%	trans-Cadina-1(6),4-diene	Sesquiterpene
69	31.96	0.73%	gamma-Murolene	Sesquiterpene
70	32.18	9.18%	Germacrene D	Sesquiterpene
71	32.44	0.58%	beta-Selinene	Sesquiterpene

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72	32.55	0.22%	1-epi-Bicyclosesquiphellandrene	Monoterpene
73	32.74	1.15%	Bicyclogermacrene	Sesquiterpene
74	32.90	0.92%	alpha-Muurolene	Sesquiterpene
75	33.07	0.09%	delta-Amorphene	Sesquiterpene
76	33.32	0.11%	beta-Bisabolene	Sesquiterpene
77	33.45	1.47%	gamma-Cadinene	Sesquiterpene
78	33.71	2.90%	delta-Cadinene	Sesquiterpene
79	34.06	0.04%	(Z)-Nerolidol	Sesquiterpenol
80	34.21	0.15%	trans-Cadina-1,4-diene	Sesquiterpene
81	34.37	0.34%	alpha-Cadinene	Sesquiterpene
82	34.53	0.12%	Selina-3,7(11)-diene	Sesquiterpene
83	34.83	0.09%	Elemol	Sesquiterpenol
84	35.17	0.76%	Germacrene B	Sesquiterpene
85	35.42	0.15%	(E)-Nerolidol	Sesquiterpenol
86	35.88	0.57%	Germacrene D-4-ol	Sesquiterpenol
87	36.04	0.23%	Caryophyllene oxide	Sesquiterpene Ether
88	36.22	0.04%	Globulol	Sesquiterpenol
89	37.10	0.12%	Humulene epoxide II	Sesquiterpene Ether
90	37.38	0.09%	Viridiflorol	Sesquiterpenol
91	37.56	0.02%	Junenol	Sesquiterpenol
92	37.84	0.29%	1,10-di-epi-Cubenol	Sesquiterpenol
93	38.00	0.04%	gamma-Eudesmol	Sesquiterpenol
94	38.22	0.16%	allo-Aromadendrene epoxide	Sesquiterpene Ester
95	38.38	0.33%	T-Cadinol	Sesquiterpenol
96	38.45	0.28%	T-Muurolol	Sesquiterpenol
97	38.55	0.10%	alpha-Muurolol	Sesquiterpenol
98	38.86	0.59%	alpha-Cadinol	Sesquiterpenol
99	40.36	0.02%	Junipercamphor	Sesquiterpene Ketone
100	41.20	0.02%	Pentadecanal	Sesquiterpene Aldehyde
101	50.10	0.05%	Sclarene	Diterpene
102	52.12	0.04%	Abietatriene	Diterpene
103	53.08	0.03%	Abietadiene	Diterpene
104	58.44	0.01%	Totarol	Diterpene