

Peppermint *Mentha x piperitone*

Batch No. HU-59191

Hungary

Monoterpenes 5.9%		Monoterpenols 48.07%		Sesquiterpenes 2.52%	
limonene	2.49	menthol	42.16	β caryophyllene	1.91
β pinene	0.96	neo-menthol	3.73	β bourbonene	0.18
α pinene	0.83	isomenthol	0.65	germacrene d	0.12
sabinene	0.39	α terpineol	0.42	β elemene + cyperene	0.07
para cymene	0.32	linalool	0.29	δ elemene	0.04
γ terpinene	0.30	neo-isomenthol	0.28	β gurjunene	0.04
myrcene	0.15	trans-sabinene hydrate	0.27	α humulene	0.04
α terpinene	0.13	neo-isopulegol	0.11	α copaene	0.03
(Z) β ocimene	0.09	cis sabinol	0.06	β copaene	0.03
terpinolene	0.08	(Z) para menth-2-en-1-ol	0.03	(E) β farnesene	0.02
α thujene	0.04	cis piperitol	0.02	isocaryophyllene	0.01
(E) β ocimene	0.04	1-decanol	0.02	aromadendrene	0.01
α phellandrene	0.03	(Z) para-mentha-2,8-dien-1-ol	0.01	bicyclgermacrene	0.01
pseudolimonene	0.02	trans-carveol	0.01	β cadinene	0.01
alloocimene	0.02	citronellol	0.01		
2-p-menthene	0.01				

Ethers 5.97%		Ketones 30.23%		Other 0.33%	
1,8 cineole	5.92	menthone	21.71	3-octanol	0.23
caryophyllene oxide	0.05	isomenthone + menthofuran	6.57	1-octen-3-ol	0.04
		pulegone	0.91	1-octanol	0.04
		piperitone	0.61	2,5 diethyltetrahydrofuran	0.02
		carvone	0.24		
		isopulegone	0.15		
		3 methyl cyclohexanone	0.02		
		octan-3-one	0.02		

Esters 6.15%	
2 methylbutyl 2 methylbutyrate	0.04
2 methyl butyl isovalerate	0.03
octan-3-yl acetate	0.01
neo-menthyl acetate	0.31
menthyl acetate	5.75
nonyl acetate	0.01

Raw Material: Peppermint

Taxonomy: *Mentha x piperita*

Production Steam Distilled leaves

Client



Source



Organic Hungarian Peppermint (*Mentha x piperita*)
HU-59191

Sample

Organic Hungarian Peppermint (*Mentha x*
Batch #:..... HU-59191
Type:..... Essential Oil
CAS Number:... 8006-90-4
Nature's Gift

Client



Website

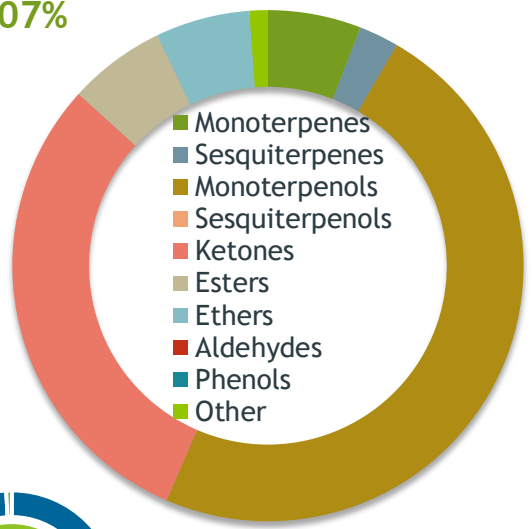


Primary

42.16% | Menthol
21.71% | Menthone
6.57% | Isomenthone (Co-Eluting)

Monoterpenols

48.07%



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 Organic Hungarian Peppermint (*Mentha x piperita*)

Internal Number: | EVS-4524



Essential Validation Services

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

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

Alan Christen

Monoterpenes	5.	5.90%
Sesquiterpenes		2.52%
Monoterpenols	48.07%	48.07%
Sesquiterpenols		0.00%
Ketones	30.23%	30.23%
Esters	6.	6.15%
Ethers	5.	5.97%
Aldehydes		0.00%
Phenols		0.00%
Other		1.16%

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- Essential Oil testing is performed by using qualitative GC-MS. Method: SOP.T.01 Client Method
- This report may not be published without the consent of Essential Validation Services.
- Chromatograph image may be requested
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Client



Source



Organic Hungarian Peppermint (*Mentha x piperita*)
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Total Percentage		99.17%		
Number	RT	Area %	Compound Name	Chemical Family
1	6.87	0.02%	2,5-Diethyltetrahydrofuran	Furan
2	7.92	0.04%	alpha-Thujene	Monoterpene
3	8.16	0.83%	alpha-Pinene	Monoterpene
4	8.88	0.02%	3-Methyl cyclohexanone	Aliphatic Ketone
5	9.71	0.39%	Sabinene	Monoterpene
6	9.88	0.96%	beta-Pinene	Monoterpene
7	10.10	0.04%	1-Octen-3-ol	Aliphatic Alcohol
8	10.21	0.01%	3-p-Menthene	Monoterpene
9	10.30	0.02%	Octan-3-one	Aliphatic Ketone
10	10.46	0.15%	Myrcene	Monoterpene
11	10.81	0.23%	3-Octanol	Aliphatic Alcohol
12	11.00	0.02%	Pseudolimonene	Monoterpene
13	11.11	0.03%	alpha-Phellandrene	Monoterpene
14	11.58	0.13%	alpha-Terpinene	Monoterpene
15	11.91	0.32%	para-Cymene	Monoterpene
16	12.12	2.49%	Limonene	Monoterpene
17	12.22	5.92%	1,8-Cineole	Monoterpene Ether
18	12.50	0.09%	(Z)-beta-Ocimene	Monoterpene
19	12.96	0.04%	(E)-beta-Ocimene	Monoterpene
20	13.43	0.30%	gamma-Terpinene	Monoterpene
21	13.95	0.27%	trans-Sabinene hydrate	Monoterpenol
22	14.12	0.04%	1-Octanol	Aliphatic Alcohol
23	14.65	0.08%	Terpinolene	Monoterpene
24	15.38	0.29%	Linalool	Monoterpenol
25	15.54	0.04%	2-Methylbutyl 2-methylbutyrate	Aliphatic Ester
26	15.80	0.03%	2-Methyl Butyl Isovalerate	Monoterpene Ester
27	16.35	0.01%	Octan-3-yl acetate	Aliphatic Ester
28	16.43	0.03%	cis-para-Menth-2-en-1-ol	Monoterpenol
29	16.68	0.02%	Alloocimene	Monoterpene
30	17.02	0.01%	cis-para-Mentha-2,8-dien-1-ol	Monoterpenol
31	17.16	0.06%	cis-Sabinol	Monoterpenol
32	17.52	0.11%	neo-Isopulegol	Monoterpenol
33	17.94	21.71%	Menthone	Monoterpene Ketone
34	18.27	6.57%	Isomenthone	Monoterpene Ketone
35	18.29	Co-Eluting	Menthofuran	Monoterpene Ether

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Number	RT	Area %	Compound Name	Chemical Family
36	18.54	3.73%	NeoMenthol	Monoterpene Ether
37	18.74	0.15%	Isopulegone	Monoterpene Ketone
38	19.10	42.16%	Menthol	Monoterpenol
39	19.41	0.65%	isoMenthol	Monoterpenol
40	19.57	0.28%	Neoisomenthol	Monoterpenol
41	19.70	0.42%	alpha-Terpineol	Monoterpenol
42	19.94	0.02%	cis-Piperitol	Monoterpenol
43	20.80	0.01%	trans-Carveol	Monoterpenol
44	21.24	0.01%	Citronellol	Monoterpenol
45	21.59	0.91%	Pulegone	Monoterpene Ketone
46	21.86	0.24%	Carvone	Monoterpene Ketone
47	22.28	0.61%	Piperitone	Monoterpene Ketone
48	23.22	0.31%	neo-Menthyl acetate	Monoterpene Ester
49	23.31	0.02%	1-Decanol	Monoterpenol
50	24.03	5.75%	Menthyl acetate	Monoterpene Ester
51	24.98	0.01%	Nonyl acetate	Monoterpene Ester
52	25.78	0.04%	delta-Elemene	Sesquiterpene
53	27.63	0.03%	alpha-Copaene	Sesquiterpene
54	27.95	0.18%	beta-Bourbonene	Sesquiterpene
55	28.25	0.07%	beta-Elemene	Sesquiterpene
56	28.71	Co-Eluting	Cyperene	Sesquiterpene
57	28.83	0.01%	Isocaryophyllene	Sesquiterpene
58	29.43	1.91%	beta-Caryophyllene	Sesquiterpene
59	29.87	0.04%	beta-Gurjunene	Sesquiterpene
60	30.20	0.01%	Aromadendrene	Sesquiterpene
61	30.73	0.03%	beta-Copaene	Sesquiterpene
62	30.89	0.04%	alpha-Humulene	Sesquiterpene
63	30.98	0.02%	(E)-beta-Farnesene	Sesquiterpene
64	31.95	0.12%	Germacrene D	Sesquiterpene
65	32.55	0.01%	Bicyclogermacrene	Sesquiterpene
66	33.52	0.01%	beta-Cadinene	Sesquiterpene
67	35.86	0.05%	Caryophyllene oxide	Sesquiterpene Ether

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