

GC-MS Profiling Analysis Prepared for Jade Bloom, Inc

Date: 2-19-2019 Sample: Peppermint Type: Essential Oil Source: *Mentha piperita* Batch: 180906680

Peak	Compound	RT	Area Sum %
1	cis-2-Hexenol	8. <mark>11</mark> 5	0.04
2	α-Thujene	9.556	0.06
3	α-Pinene	9.831	0.94
4	Camphene	10.579	0.05
5	3-Methylcyclohexanone	10.714	0.07
6	Thuja-2,4(10)-diene	10.921	0.02
7	Sabinene	12.126	0.29
8	β-Pinene	12.205	1.38
9	1-Octen-3-ol	12.782	0.05
10	m-Menthane	13.058	0.02
11	1-Octen-3-ol	13.186	0.03
12	<mark>β-Myrcene</mark>	13. <mark>4</mark> 32	0.23
13	3-Octanol	13.767	0.12
14	α-Phellandrene	14.013	0.07
15	δ3-carene	14.445	0.03
16	α-Terpinene	14.909	0.09
17	1-p-Menthene	15.177	0.03
18	p-Cymene	15.473	0.2
19	Limonene	15.726	2.66
20	1,8-Cineole	15.823	5.9
21	2-Ethylhexanol	16.114	0.04
22	(Z)-β-Ocimene	16.712	0.03
23	(E)-β-Ocimene	17.422	0.04
24	γ-Terpinene	17.993	0.13
25	cis-Sabinene hydrate	18.558	0.07
26	Octanol	19.283	0.09
27	α-Terpinolene	20.193	0.12
28	trans-Sabinene hydrate	20.946	0.03
29	2-Methylbutyl-2-methylbutyrate	21.242	0.03
30	Linalool	21.343	0.06
31	Amyl isovalerate	21.79	0.02
32	unknown	23.843	0.05
33	cis-p-Mentha-2,8-dien-1-ol	24.217	0.03
34	Isopulegol	24.595	0.09
35	Menthone	25.315	23.06
36	Isomenthone	26.092*	5.13
37	Menthofuran	26.092*	[5.13]
38	Neo-Menthol	26.25	3.77
39	Menthol	27.024	41.4
40	Terpinen-4-ol	27.222	0.4
41	Isomenthol	27.709	0.53
42	α-Terpineol	28.377	0.91
43	Pulegone	32.297	0.67
44	Carvone	32.754	0.04
45	Piperitenone	33.517	0.27

	Total identified		99.64%
68	Viridiflorol	59.586	0.03
67	Caryophyllene oxide	58.858	0.02
66	δ-Cadinene	55.011	0.05
65	Bicyclogermacrene	52.628	0.07
64	Germacrene D	51.48	0.19
63	(E)-β-Famesene	50.435	0.04
62	α-Humulene	49.271	0.1
61	unknown	47.72	0.04
60	β-Copaene	47.427	0.09
59	unknown	47.072	0.03
58	β-Caryophyllene	46.622	3.05
57	unknown	46.073	0.12
56	unknown	45.744	0.12
55	β-Elemene	44.846	0.05
54	β-Bourbonene	43.983	0.16
53	α-Copaene	43.356	0.28
52	α-Cubebene	41.697	0.04
51	Bicycloelemenene	40.392	0.09
50	Isomenthyl acetate	38.21	0.12
49	Menthyl acetate	37.243	5.74
48	Dihydroedulan II	36.756	0.04
47	Dihydroedulan I	36.248	0.04
46	neo-Menthyl acetate	35.649	0.23

