

Laboratory Test Report

SAMPLE NAME : Peppermint
CLIENT NAME : Plant Therapy
CLIENT LOT # : P50115R
APRC LOT# : PT240429B

Column : ZB5 (60 m length × 0.25 mm inner diameter × 0.25 µm film thicknes)
Instrument : Shimadzu GCMS-QP2010 Ultra
Carrier gas : Helium 80 psi
Temperature ramp : 2 degrees Celsius per minute up to 260-degree Celsius
Split ratio : 30:1
Sample preparation : 5% w/v solution with Dichloromethane

Interpretation on this sample

The analysis of Peppermint sample meets the standard chemical profile of *Mentha piperita* essential oil.

Analyzed by : Dr Prabodh Satyal

Reviewed by : Ambika Poudel

Issued Date : 5/1/2024

Peak Report

Peak#	R.Time	Name	Area%
1	10.646	2,5-Diethyl tetrahydrofuran	0.01
2	12.113	alpha-Thujene	0.03
3	12.529	alpha-Pinene	0.68
4	13.454	Camphene	0.01
5	13.768	3-Methyl cyclohexanone	0.02
6	14.730	Sabinene	0.37
7	15.046	beta-Pinene	0.89
8	15.164	1-Octen-3-ol	0.02
9	15.408	3-para-Menthene	0.01
10	15.513	3-Octanone	0.01
11	15.648	Myrcene	0.19
12	16.160	3-Octanol	0.24
13	16.749	alpha-Phellandrene	0.02
14	17.402	alpha-Terpinene	0.14
15	17.935	para-Cymene	0.14
16	18.222	Limonene	2.36
17	18.340	beta-Phellandrene	0.03
18	18.443	1,8-Cineole	5.32
19	18.578	cis-beta-Ocimene	0.12
20	19.269	trans-beta-Ocimene	0.04
21	20.066	gamma-Terpinene	0.23
22	20.911	cis-Sabinene hydrate	0.21
23	21.865	Terpinolene	0.08
24	22.894	Linalool	0.11
25	23.033	2-Methyl butyl 2-methyl butyrate	0.06
26	23.421	2-Methyl butyl isovalerate	0.02
27	26.347	Isopulegol	0.10
28	27.100	Menthone	25.39
29	27.414	Menthofuran	2.75
30	27.574	Isomenthone	3.88
31	27.873	Neomenthol	4.60
32	27.925	delta-Terpineol	0.08
33	28.230	trans-Isopulegone	0.02
34	28.711	Menthol	37.64
35	29.186	iso-Menthol	0.37
36	29.368	neoiso-Menthol	0.04
37	29.619	alpha-Terpineol	0.21
38	32.211	3-cis-Hexenyl 2-methyl butanoate	0.02
39	32.556	Pulegone	1.02
40	32.984	Carvone	0.06
41	33.634	Piperitone	0.23
42	34.715	neo-Menthyl acetate	0.21
43	36.014	Menthyl acetate	9.16
44	36.147	Dihydroedulan	0.03
45	36.943	iso-Menthyl acetate	0.13
46	41.500	alpha-Copaene	0.02
47	42.024	beta-Bourbonene	0.09
48	42.400	beta-Elemene	0.04
49	44.265	beta-Ylangene	0.04
50	44.350	beta-Caryophyllene	1.25
51	44.988	beta-Copaene	0.03
52	46.379	trans-beta-Farnesene	0.17
53	46.602	alpha-Humulene	0.06
54	47.814	trans-Cadina-1(6),4-diene	0.03
55	48.212	Germacrene D	0.70
56	49.085	Bicyclogermacrene	0.10
57	49.312	alpha-Murolene	0.03
58	49.330	Valencene	0.01
59	50.448	delta-Cadinene	0.05
60	54.324	Caryophyllene oxide	0.03
61	55.055	Viridiflorol	0.06
			100.00