

GC-MS Profiling Analysis Prepared for Jade Bloom, Inc

Date: January 25, 2018
Sample: Myrtle
Type: Essential Oil
Source: *Myrtus communis*
Batch: 2024418005

IDENTIFIED COMPOUNDS

Identification	Column: BP5			Column: WAX			Molecular Class
	R.T.	R.I.	%	%	R.I.	R.T.	
Isoamyl alcohol	1.11	732	0.03	0.31	1160	2.78*	Aliphatic alcohol
2,4-Dimethyl-3-pentanone	1.55	789	0.24	0.22	907	0.88	Aliphatic ketone
Hexanal	1.71	805	0.03	0.03	1018	1.40	Aliphatic aldehyde
<i>cis</i> -Hex-3-en-1-ol	2.50	865	0.02	0.02	1332	5.19	Aliphatic alcohol
Hexanol	2.73	882	0.02	0.01	1296	4.64	Aliphatic alcohol
Isobutyl isobutyrate	3.23	915	0.69	0.67	1039	1.56	Aliphatic ester
α -Thujene	3.32	920	0.13	0.20	960	1.06	Monoterpene
α -Pinene	3.46	929	24.14	24.07	955	1.04	Monoterpene
α -Fenchene	3.69	942	0.02	0.02	992	1.21	Monoterpene
Camphene	3.71	943	0.07	0.07	999	1.26	Monoterpene
Geranic oxide	4.09	966	0.01	0.01	1055	1.67	Monoterp. ether
Sabinene	4.14	969	0.02	0.03	1062	1.73	Monoterpene
β -Pinene	4.20	972	0.37	0.36	1042	1.58	Monoterpene
Myrcene	4.48	989	0.20	0.19	1118	2.26	Monoterpene
<i>trans</i> -Dehydroxylinalool oxide	4.50	990	0.20	[0.31]	1160	2.78*	Monoterp. ether
Isobutyl 2-methylbutyrate	4.71	1002	0.02	0.01	1133	2.45	Aliphatic ester
α -Phellandrene	4.76*	1005	0.24	0.05	1111	2.18	Monoterpene
Δ 3-Carene	4.76*	1005	[0.24]	0.15	1097	2.00	Monoterpene
α -Terpinene	4.95*	1015	0.12	0.08	1124	2.34	Monoterpene
<i>cis</i> -Dehydroxylinalool oxide	4.95*	1015	[0.12]				Monoterp. ether
1,8-Cineole	5.30*	1034	45.61	36.26	1157	2.74	Monoterp. ether
Limonene	5.30*	1034	[45.61]	9.40	1147	2.62	Monoterpene
para-Cymene	5.30*	1034	[45.61]	0.50	1209	3.42	Monoterpene
<i>cis</i> - β -Ocimene	5.36	1037	0.10	0.59	1187	3.15*	Monoterpene
<i>trans</i> - β -Ocimene	5.54	1047	0.24	0.23	1202	3.33	Monoterpene
γ -Terpinene	5.73	1057	0.35	[0.59]	1187	3.15*	Monoterpene
<i>cis</i> -Linalool oxide (fur.)	6.01	1072	0.09	0.05	1384	5.95	Monoterp. alcohol
Terpinolene	6.21	1083	0.30	0.28	1222	3.61	Monoterpene
<i>trans</i> -Linalool oxide (fur.)	6.32	1089	0.03	0.04	1410	6.39	Monoterp. alcohol
para-Cymenene	6.43	1095	0.09	0.07	1371	5.75	Monoterpene
Linalool	6.76	1108	7.08	8.59	1506	8.34*	Monoterp. alcohol
endo-Fenchol	7.17	1123	0.03	0.05	1521	8.83	Monoterp. alcohol
<i>trans</i> -Pinocarveol	7.63	1139	0.24	0.23	1575	10.54	Monoterp. alcohol
Borneol	8.65	1176	0.14	1.70	1619	12.16*	Monoterp. alcohol
Terpinen-4-ol	8.82	1182	0.35	0.33	1532	9.19*	Monoterp. alcohol
para-Cymen-8-ol	9.27	1198	0.08	0.06	1769	19.94	Monoterp. alcohol
α -Terpineol	9.60*	1206	7.37	4.48	1631	12.72	Monoterp. alcohol
Myrtenol	9.60*	1206	[7.37]	2.89	1715	16.70*	Monoterp. alcohol
Nerol	10.60	1228	0.09	0.10	1737	18.04	Monoterp. alcohol

Citronellol	10.86	1233	0.06	[2.89]	1715	16.70*	Monoterp. alcohol
Linalyl acetate	11.43	1246	1.48	[8.59]	1506	8.34*	Monoterp. ester
Geraniol	11.93	1257	1.35	1.35	1791	21.34	Monoterp. alcohol
<i>trans</i> -Pinocarvyl acetate	13.62	1294	0.11	[0.33]	1532	9.19*	Monoterp. ester
Myrtenyl acetate	15.25	1319	1.72	1.67	1610	11.74	Monoterp. ester
Carvacrol	15.61	1325	0.27	0.29	2139	39.65	Monoterp. alcohol
α -Terpinyl acetate	16.72	1341	1.64	[1.70]	1619	12.16*	Monoterp. ester
Neryl acetate	17.87	1359	0.11	0.12	1662	14.12	Monoterp. ester
Geranyl acetate	19.39	1382	0.89	0.88	1696	15.70	Monoterp. ester
β -Caryophyllene	20.63	1400	0.32	0.32	1518	8.72	Sesquiterpene
Methyleugenol	21.69	1412	0.38	0.39	1946	31.65	Phenylpropanoid
α -Humulene	23.43	1433	0.17	0.18	1579	10.66	Sesquiterpene
Unknown (m/z = 166, 123 (41), 236 (30), 151 (22), 41 (18))	29.98	1513	0.29				
Flavesone	31.82	1539	0.11	0.06	1899	28.82	Terpenic ketone
Caryophyllene oxide	33.86	1568	0.12	0.09	1847	25.11	Sesquiterp. ether
Total identified			97.49%	97.7%			

*: Two or more compounds are coeluting on this column

[xx]: Duplicate percentage due to coelutions, not taken account in the identified total

Note: no correction factor was applied

OTHER DATA

Physical aspect : Light yellow liquid

Refractive index : 1.4640 \pm 0.0003 (20 °C)

CONCLUSION

No adulterant, contaminant or diluent were detected using this method.