



Essential Validation Services



Sample:

Client: | Artisan Aromatics
Sample: | Tea Tree (Melaleuca alternifolia)
Batch # | Tea Tree Sample Report
CAS Number | 68647-73-4
Type: | Essential Oil

Conclusion:

- No adulterants, diluents, or contaminants were detected via this method.
- This oil meets the expected profile for genuine essential oil of Tea Tree (Melaleuca alternifolia).



X

Validated By: _____

Essential Validation Services

747 SW 2nd Ave, Gainesville, FL 32601

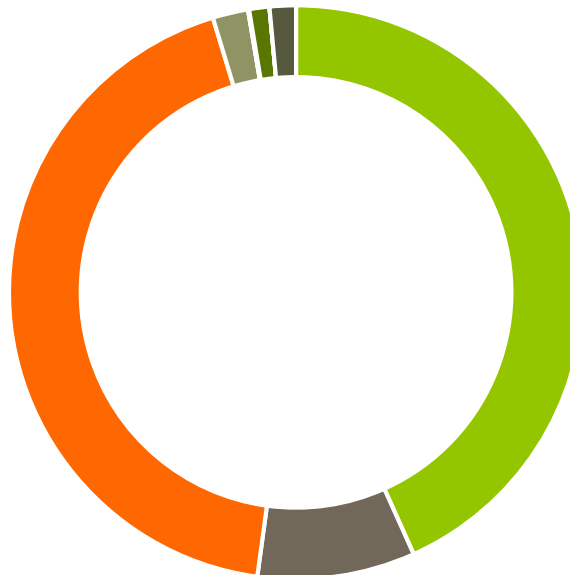
Phone: 317-361-5044 E-mail: Adam@essentialvalidationservices.com

Summary of Analyses

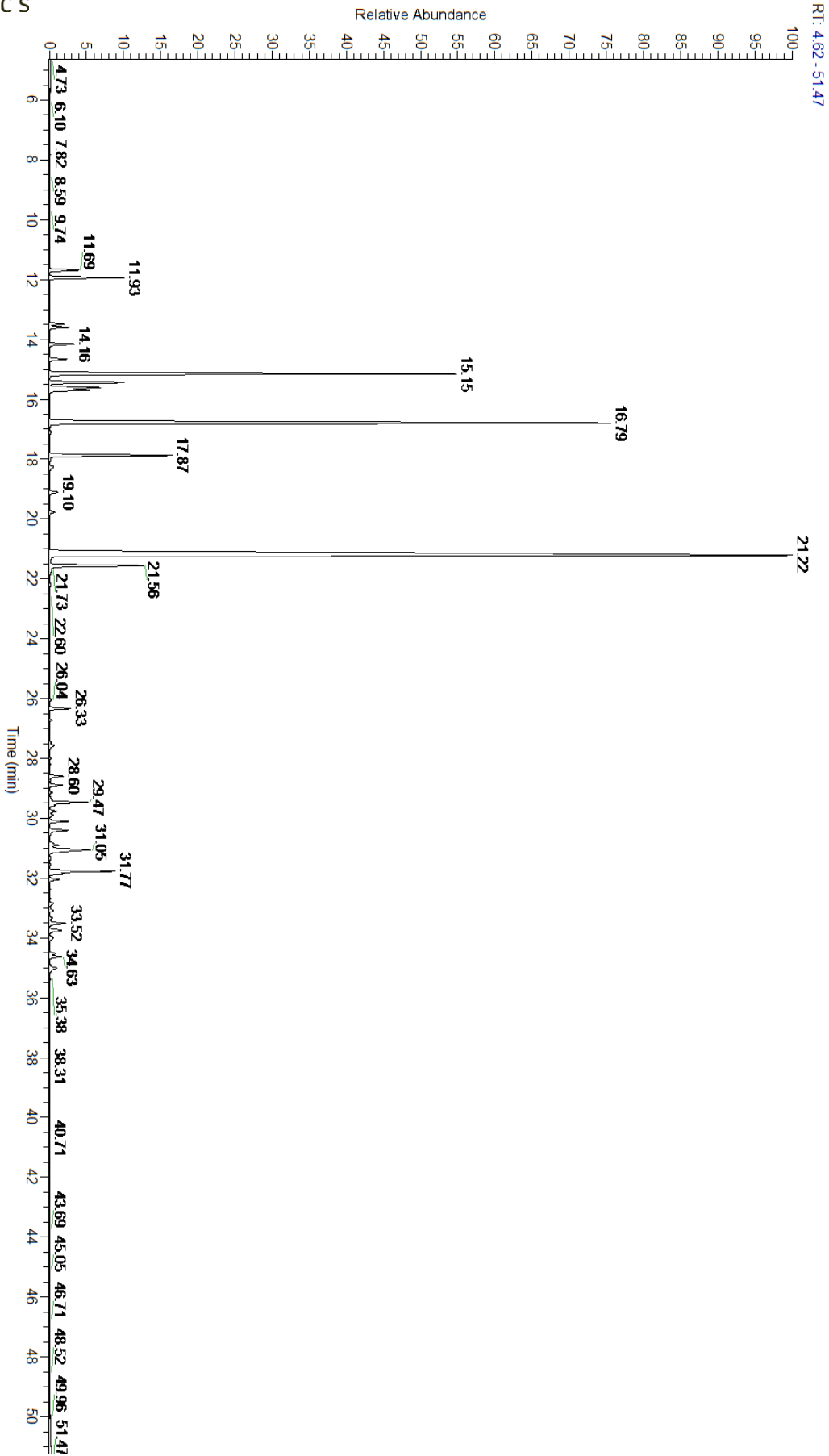
A fresh sample of Tea Tree (Melaleuca alternifolia) Essential Oil (10 uL in .5 to .5 mL Hexane + ETOH) was prepared and analyzed via split injection GC/EI-MS.

Main Compounds	Percentages
Terpinen-4-ol	39.62%
gamma-Terpinene	19.72%
alpha-Terpinene	11.56%
Terpinolene	3.54%
alpha-Terpineol	2.87%
para-Cymene	2.06%
alpha-Pinene	2.03%
delta-Cadinene	1.94%
Viridiflorene	1.84%
Limonene	1.52%
Aromadendrene	1.24%
1,8-Cineole	1.14%
alpha-Thujene	0.78%

Monoterpenes	Sesquiterpenes	Monoterpenols	Sesquiterpenols	Ketones
43.28%	8.88%	43.16%	2.00%	0.00%
Esters	Ethers	Aldehydes	Phenols	Other
0.06%	1.14%	0.00%	0.00%	1.48%



- Monoterpenes ■ Sesquiterpenes ■ Monoterpenols
- Sesquiterpenols ■ Ketones ■ Esters
- Ethers ■ Phenols ■ Other





Total Percentage		98.52%			
Peak Number	RT	Area %	Compound Name	RI	Chemical Family
1	11.69	0.78%	alpha-Thujene	927.80	Monoterpene
2	11.93	2.03%	alpha-Pinene	936.10	Monoterpene
3	13.49	0.38%	Sabinene	973.00	Monoterpene
4	13.60	0.56%	beta-Pinene	974.00	Monoterpene
5	14.16	0.66%	Myrcene	989.20	Monoterpene
6	14.66	0.47%	alpha-Phellandrene	1002.00	Monoterpene
7	15.15	11.56%	alpha-Terpinene	1014.00	Monoterpene
8	15.44	2.06%	para-Cymene	1024.30	Monoterpene
9	15.61	1.52%	Limonene	1029.50	Monoterpene
10	15.70	1.14%	1,8-Cineole	1031.80	Monoterpene Ether
11	16.79	19.72%	gamma-Terpinene	1054.00	Monoterpene
12	17.09	0.05%	trans-Sabinene hydrate	1072.00	Monoterpenol
13	17.87	3.54%	Terpinolene	1092.10	Monoterpene
14	18.00	0.01%	cis-Sabinene hydrate	1094.50	Monoterpenol
15	18.26	0.16%	Linalool	1099.00	Monoterpenol
16	19.10	0.25%	cis-para-Menth-2-en-1-ol	1118.25	Monoterpenol
17	19.77	0.17%	trans-para-Menth-2-en-1-ol	1141.75	Monoterpenol
18	21.22	39.62%	Terpinen-4-ol	1180.57	Monoterpenol
19	21.56	2.87%	alpha-Terpineol	1191.71	Monoterpenol
20	22.18	0.03%	trans-Piperitol	1208.50	Monoterpenol
21	26.33	0.59%	delta-Elemene	1335.83	Sesquiterpene
22	26.71	0.06%	alpha-Cubebene	1355.71	Sesquiterpene
23	27.47	0.06%	Geranyl acetate	1378.50	Monoterpene Ester
24	27.56	0.20%	alpha-Copaene	1379.00	Sesquiterpene
25	28.01	0.04%	beta-Elemene	1389.20	Sesquiterpene
26	28.60	0.42%	alpha-Gurjunene	1412.00	Sesquiterpene
27	28.90	0.38%	beta-Caryophyllene	1427.14	Sesquiterpene
28	29.14	0.07%	gamma-Elemene	1434.00	Sesquiterpene
29	29.29	0.01%	beta-Gurjunene	1437.71	Sesquiterpene
30	29.36	0.07%	alpha-Guaiene	1438.67	Sesquiterpene
31	29.47	1.24%	Aromadendrene	1449.80	Sesquiterpene
32	29.77	0.22%	cis-Muurola-3,5-diene	1456.75	Sesquiterpene
33	29.89	0.13%	alpha-Humulene	1461.43	Sesquiterpene
34	30.11	0.56%	allo-Aromadendrene	1471.00	Sesquiterpene
35	30.90	0.36%	Bicyclogermacrene	1490.71	Sesquiterpene
36	31.05	1.84%	Viridiflorene	1494.14	Sesquiterpene
37	31.34	0.05%	delta-Guaiene	1511.50	Sesquiterpene
38	31.55	0.02%	gamma-Cadinene	1515.29	Sesquiterpene
39	31.77	1.94%	delta-Cadinene	1524.14	Sesquiterpene
40	31.86	0.39%	trans-Calamenene	1529.50	Sesquiterpene
41	32.04	0.29%	alpha-Cadinene	1537.86	Sesquiterpene
42	32.86	0.14%	Elemol	1538.00	Sesquiterpenol
43	33.08	0.14%	Spathulenol	1587.00	Sesquiterpenol

