

Sample Information

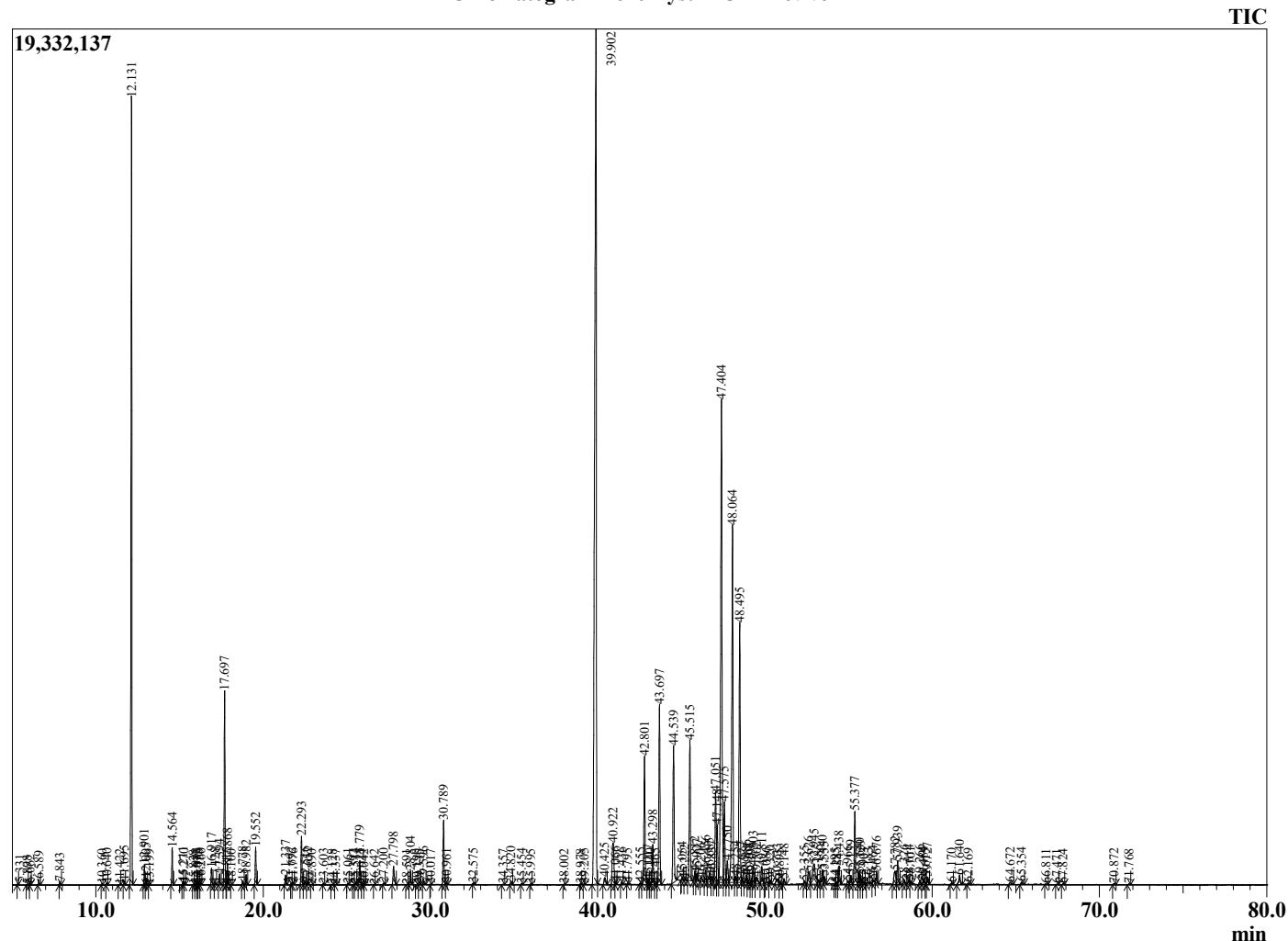
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 2/11/2022 4:34:22 AM
 Sample Type : Essential Oil
 Sample Name : Helichrysum Oil - Revive
 Sample ID : 1342
 Injection Volume : 0.10 µL
 Instrument ID: : GC-2



Peak Report TIC

R.Time	Name	Area%
4.406	3-Pentanone	0.01
5.331	2-Methyl-3-pentanone	0.01
5.898	Unidentified	0.01
6.062	Unidentified	0.01
6.589	2-Methyl-2-heptene	0.06
7.843	4-Methyl-3-hexanone	0.04
10.360	Nonane	0.01
10.640	Bornylene	0.02
11.422	Hashishene	0.01
11.695	alpha-Thujene	0.05
12.131	alpha-Pinene	11.74
12.901	alpha-Fenchene	0.27
12.995	Camphene	0.09
13.199	Thuja-2,4(10)-diene	0.01
14.564	beta-Pinene	0.52
15.211	Myrcene	0.05
15.270	Unidentified	0.02
15.828	delta-3-Carene	0.01
15.982	Isobutyl 2-methylbutyrate	0.02
16.075	Octanal	0.01
16.159	Hex-(3Z)-enyl acetate	0.03
16.260	alpha-Phellandrene	0.03
16.917	alpha-Terpinene	0.23
17.128	para-Methylanisole	0.04
17.394	para-Cymene	0.16
17.697	Limonene	2.87
17.815	beta-Phellandrene	0.02
17.868	1,8-Cineole	0.31
18.100	(Z)-beta-Ocimene	0.01
18.778	(E)-beta-Ocimene	0.06
18.982	Isobutyl angelate	0.15
19.552	gamma-Terpinene	0.57
21.337	Terpinolene	0.15
21.692	2-Nonanone	0.03
21.776	2,4-Dimethylheptane-3,5-dione	0.03
22.293	Linalool	0.77
22.516	2-Methylbutyl-2-methylbutyrate	0.06
22.652	Nonanal	0.03
22.890	2-Methylbutyl isovalerate	0.01
23.603	endo-Fenchol	0.02
24.128	alpha-Campholenal	0.01
24.337	Unidentified	0.01
25.061	trans-Pinocarveol	0.02
25.397	trans-Verbenol	0.00
25.514	Unidentified	0.02
25.779	Isoamyl angelate	0.42
25.914	Unidentified	0.01
26.042	Camphene hydrate	0.01
26.642	Unidentified	0.01
27.200	Borneol	0.02
27.798	4,6-Dimethyloctane-3,5-dione+Terpinen-4-ol	0.40
28.591	2-Decanone	0.00
28.804	alpha-Terpineol	0.24
29.190	Dodecane	0.01
29.335	Unidentified	0.01
29.596	Decanal	0.05
30.017	Unidentified	0.01
30.789	Nerol	1.08
30.961	Unidentified	0.03
32.575	Unidentified	0.03
34.357	(3Z)-Hexenyl angelate	0.01
34.820	Hexyl angelate	0.06

Chromatogram Helichrysum Oil - Revive



Comments:

The analysis of this Helichrysum batch sample meets the expected chemical profile for authentic essential oil of *Helichrysum italicum*. No contamination or adulteration was detected. The results provided in this GCMS quality analysis reflect the chemical composition of the oil and lot referenced above on the date of analysis.

R.Time	Name	Area%
35.454	2-Undecanone	0.02
35.995	Tridecane	0.01
38.002	Unidentified	0.01
38.978	alpha-Terpinyl acetate	0.01
39.205	Geraniol	0.02
39.902	Neryl acetate	25.04
40.425	Cyclosativene	0.20
40.922	alpha-Copaene+Isoitalicene	1.23
41.066	Geranyl acetate	0.04
41.436	trans-Verbenyl acetate	0.04
41.795	beta-Elemene	0.02
42.555	Tetradecane	0.04
42.801	Italicene	2.53
43.017	Italicene isomer	0.09
43.140	Dodecanal	0.02
43.298	cis-alpha-Bergamotene	0.75
43.465	alpha-Cedrene	0.02
43.697	trans-beta-Caryophyllene	3.43
44.539	4,6,9-Trimethyldec-8-en-3,5-dione	2.97
45.054	6,9-Guaiadiene	0.06
45.222	Selina-5,11-diene	0.01
45.515	Neryl propionate	2.67
45.812	(E)-beta-Farnesene	0.18
45.927	alpha-Humulene	0.15
46.206	Alloaromadendrene	0.09
46.456	alpha-Acoradiene	0.21
46.685	beta-Acoradiene	0.23
46.837	Aristolochene isomer	0.10
47.051	Selina-4,11-diene	1.89
47.148	2,4,6,9-Trimethyldec-8-en-3,5-dione	1.04
47.404	gamma-Curcumene	11.66
47.575	Ar-Curcumene	1.56
47.750	trans-beta-Bergamotene	0.50
48.064	beta-Selinene	7.85
48.254	trans-Murrola-4(14),5-diene	0.15
48.495	alpha-Selinene	5.31
48.622	alpha-Murolene	0.09
48.886	delta-Amorphene	0.19
48.965	Unidentified	0.08
49.196	beta-Bisabolene	0.11
49.303	beta-Curcumene	0.38
49.502	gamma-Cadinene	0.22
49.811	delta-Cadinene	0.42
50.086	Zonarene	0.07
50.320	(E)-gamma-Bisabolene	0.06
50.733	Italicene ether	0.17
50.895	alpha-Cadinene	0.03
51.148	(E)-alpha-Bisabolene	0.10
52.355	(E)-Nerolidol	0.06
52.626	3,5,7,10-Tetramethylundec-9-en-4,6-dione isc	0.41
52.945	3,5,7,10-Tetramethylundec-9-en-4,6-dione isc	0.98
53.185	Caryophyllenyl alcohol	0.14
53.440	Neryl isovalerate	0.36
53.555	Caryophyllene oxide	0.15
54.195	Unidentified	0.02
54.285	Unidentified	0.03
54.438	Guaiol	0.35
54.966	Unidentified	0.08
55.139	Copaborneol	0.18
55.377	Rosifoliol	1.48
55.640	Unidentified	0.23
55.729	Unidentified	0.16
55.903	10-epi-gamma-Eudesmol	0.04

R.Time	Name	Area%
56.183	Unidentified	0.04
56.464	Eudesmol analogue	0.03
56.676	gamam-Eudesmol	0.21
57.782	alpha-Eudesmol	0.41
57.939	Unidentified	0.46
58.326	Bulnesol	0.10
58.614	beta-Bisabolol	0.10
58.701	epi-beta-Bisabolol	0.05
59.266	Unidentified	0.09
59.484	alpha-Bisabolol	0.09
59.615	Unidentified	0.03
59.727	Neryl hexanoate	0.14
61.170	Pentadecanal-	0.03
61.640	Geraniol hexanoate	0.23
62.169	Unidentified	0.04
64.672	Unidentified	0.07
65.354	Unidentified	0.06
66.811	Unidentified	0.01
67.471	Unidentified	0.01
67.824	Phytone	0.02
70.872	Nonadecane	0.02
71.768	Geranyl octanoate	0.02
		100.00