

Sample Information

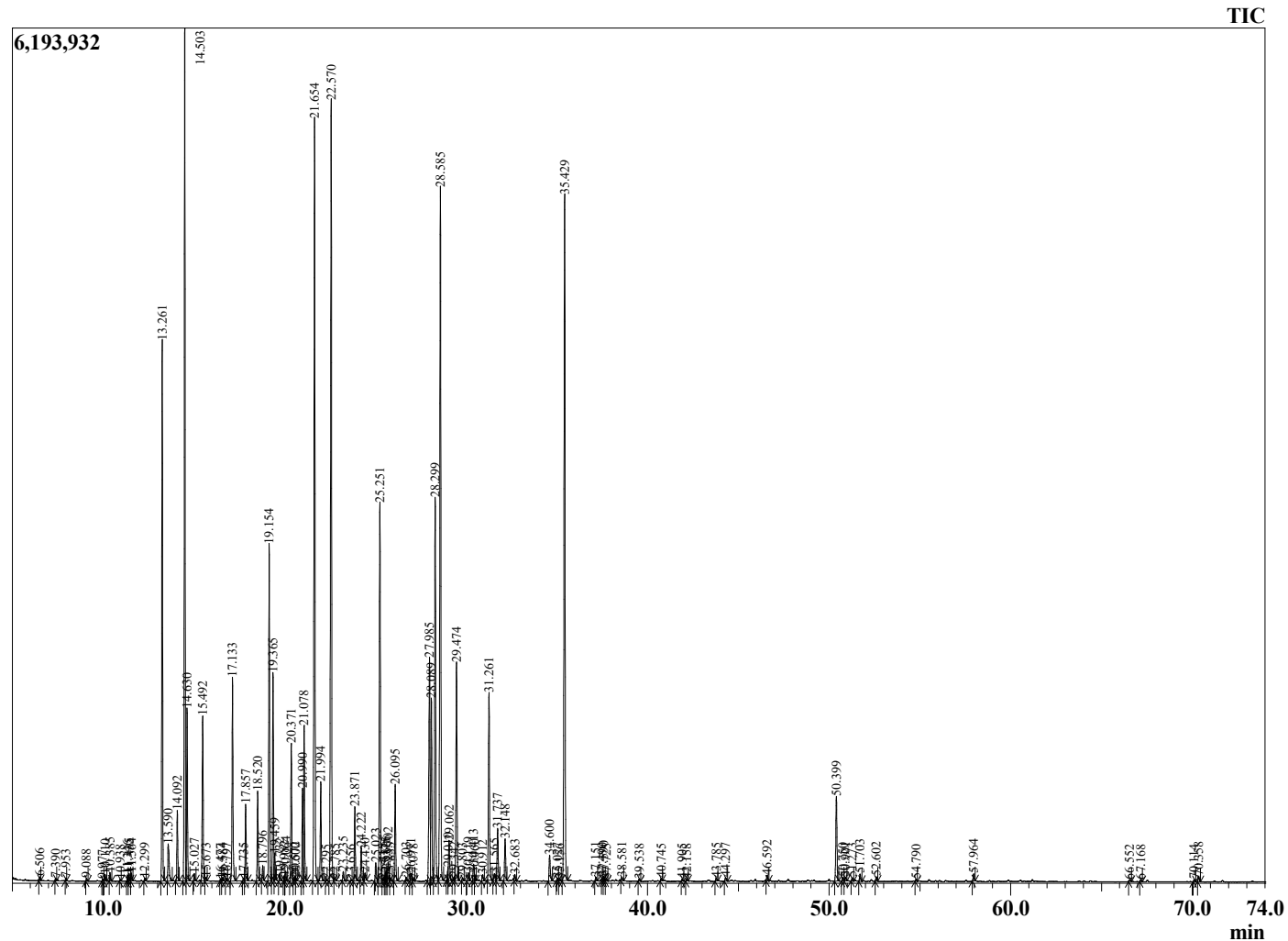
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 7/8/2022 12:39:49 PM
 Sample Type : Essential Oil
 Sample Name : Roman Chamomile Oil - Barefut
 Sample ID : 0105
 Injection Volume : 0.10
 Instrument ID : GC-2



Peak Report TIC

R.Time	Name	Area%
6.506	2-Methylbutanol	0.03
7.390	Isobutyl acetate	0.02
7.953	1-Octene	0.02
9.088	Methyl tiglate	0.02
9.977	3-Methyl pentanol	0.02
10.110	Ethyl 2-methylbutyrate	0.06
10.385	Propyl isobutyrate	0.08
10.938	Isobutyl propionate	0.01
11.346	Isoamyl acetate	0.06
11.435	2-Methylbutyl acetate	0.07
11.564	Propyl methacrylate	0.07
12.299	Unidentified	0.03
13.261	Isobutyl isobutyrate	5.08
13.590	Prenyl acetate	0.58
14.092	2,5,8-Trimethyl nonane	0.70
14.503	alpha-Pinene	8.56
14.630	Isobutyl methacrylate	1.68
15.027	2-Methylpropylbutyrate	0.08
15.492	3-Methylcyclohexanone	1.90
15.673	Thuja-2,4(10)-diene	0.04
16.477	Isopentyl propanoate	0.02
16.584	2-Methylbutyl propanoate	0.03
16.797	Sabinene	0.03
17.133	beta-Pinene	2.33
17.735	Myrcene	0.04
17.857	Propyl angelate	0.81
18.520	Isobutyl-2-methylbutyrate	0.95
18.796	Isobutyl isovalerate	0.16
19.154	Isoamyl isobutyrate	3.61
19.365	2-Methylbutyl isobutyrate	2.22
19.459	Unidentified	0.26
19.732	Unidentified	0.08
19.982	Unidentified	0.05
20.064	para-Cymene	0.11
20.371	Limonene	1.53
20.572	beta-Phellandrene	0.05
20.600	1,8-Cineole	0.03
20.990	Pentyl methacrylate	1.00
21.078	Isopentyl methacrylate	1.73
21.654	Isobutyl angelate	9.18
21.994	Prenyl isobutyrate	1.11
22.295	gamma-Terpinene	0.02
22.570	Methallyl angelate	9.71
22.785	Unidentified	0.04
23.235	Hexyl propanoate	0.11
23.656	Unidentified	0.01
23.871	Camphenilone	0.85
24.222	Butyl angelate	0.38
24.430	Isobutyl tiglate	0.10
25.023	Isopentyl 2-methylbutyrate	0.24
25.251	2-Methylbutyl-2-methylbutyrate	4.62
25.415	Nonanal	0.04
25.575	Unidentified	0.08
25.606	2-Methylbutyl-3-methylbutyrate	0.12
25.702	Isobutyl hexanoate	0.23
25.835	Unidentified	0.04
26.095	Hexyl isobutyrate	1.12
26.703	Unidentified	0.04
26.971	alpha-Campholenal	0.09
27.078	Unidentified	0.03
27.985	trans-Pinocarveol	2.92
28.089	Butanoic Acid Ester	2.22

Roman Chamomile Oil - Barefut



Comments:

The analysis of this Roman Chamomile batch sample meets the expected chemical composition of authentic essential oil of *Anthemis nobilis*. No contamination or adulteration 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%
28.299	Isoamyl angelate	4.79
28.585	2-Methylbutyl angelate	8.63
29.010	Camphene hydrate	0.11
29.062	Amyl angelate isomer	0.54
29.342	trans-Pinocamphone	0.03
29.474	Pinocarvone	2.73
29.803	Unidentified	0.03
30.119	Borneol	0.10
30.413	Isopinocamphone	0.20
30.460	Menthol	0.07
30.912	Unidentified	0.08
31.261	2-Methyl-2-butene angelate	2.30
31.565	2-Methylbutyl tilgate	0.13
31.737	Myrtenal	0.69
32.148	3-Methyl-3-methylpentyl butanoate	0.52
32.683	Unidentified	0.07
34.600	2-Hydroxy-2-methyl-but-3-enyl 2-methyl-2-ci	0.36
35.027	Carvone	0.04
35.156	4-Methyl amyl angelate	0.03
35.429	Methylpentyl angelate	8.95
37.151	3-cis-Hexenyl angelate	0.05
37.490	Unidentified	0.04
37.590	Hexyl angelate	0.06
37.725	Bornyl acetate	0.03
38.581	3-Methylpentyl-2-methyltiglate	0.04
39.538	2-Ethylbutyl hexanoate	0.03
40.745	Unidentified	0.03
41.905	7-epi-Silphiperfol-5-ene	0.02
42.158	Unidentified	0.03
43.785	alpha-Copaene	0.04
44.297	Unidentified	0.05
46.592	beta-Caryophyllene	0.07
50.399	Germacrene D	1.12
50.750	3,5,11-Eudesmatriene	0.04
50.901	beta-Selinene	0.05
51.273	Bicyclogermacrene	0.04
51.703	trans,trans-alpha-Farnesene	0.09
52.602	delta-Cadinene	0.06
54.790	Unidentified	0.02
57.964	Copaborneol	0.10
66.552	Unidentified	0.02
67.168	Unidentified	0.02
70.114	Neophytadiene	0.03
70.358	Phytone	0.07
		100.00