

Sample Information

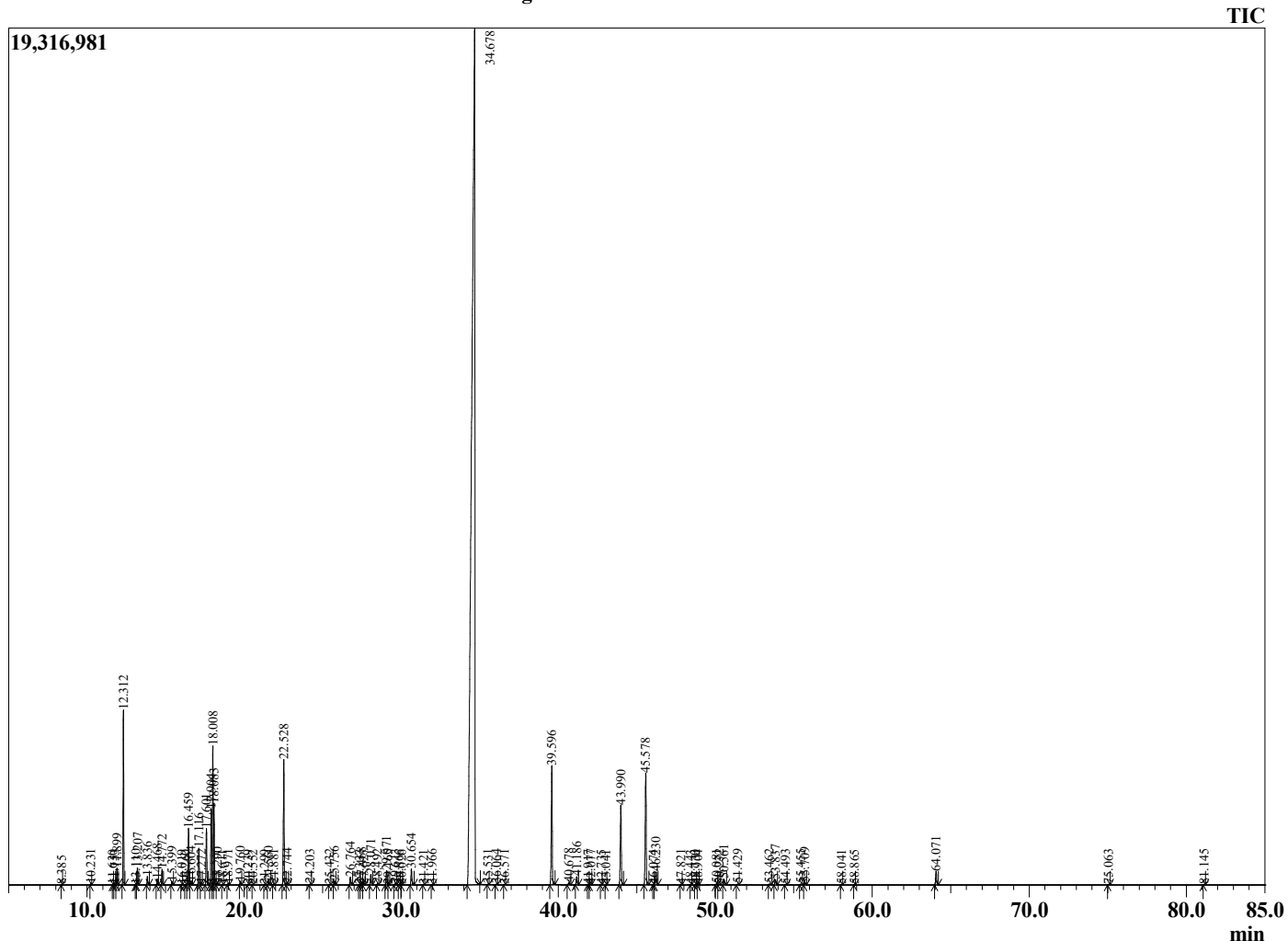
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 12/2/2021 2:13:42 AM
 Sample Type : Essential Oil
 Sample Name : Cinnamon Bark Oil - Barefut
 Sample ID : 0111
 Injection Volume : 0.10
 Instrument ID: GC-4



Peak Report TIC

R.Time	Name	Area%
8.385	Ethyl 2-methylbutyrate	0.00
10.231	Styrene	0.02
11.630	Hashishene	0.00
11.753	Tricyclene	0.01
11.899	alpha-Thujene	0.29
12.312	alpha-Pinene	3.04
13.110	alpha-Fenchene	0.01
13.207	Camphene	0.32
13.836	Benzaldehyde	0.16
14.468	Sabinene	0.11
14.772	beta-Pinene	0.30
15.399	Myrcene	0.07
16.019	Terpinolene	0.01
16.260	Octanal	0.01
16.459	alpha-Phellandrene	1.13
16.604	delta-3-Carene	0.08
17.116	alpha-Terpinene	0.75
17.272	ortho-Cymene	0.02
17.601	para-Cymene	1.17
17.904	Limonene	1.69
18.008	beta-Phellandrene	2.97
18.083	1,8-Cineole	1.55
18.290	cis-beta-Ocimene	0.05
18.611	Butyl 2-methylbutyrate	0.01
18.971	trans-beta-Ocimene	0.03
19.760	gamma-Terpinene	0.08
20.239	Acetophenone	0.00
20.552	trans-Sabinene hydrate	0.01
21.299	Isoterpinolene	0.01
21.560	Terpinolene	0.09
21.881	para-Cymenene	0.02
22.528	Linalool	2.86
22.744	2-Methylbutyl-2-methylbutyrate	0.03
24.203	cis-para-Menth-2-en-1-ol	0.02
25.432	trans-para-Menth-2-en-1-ol + Unidentified	0.02
25.756	Camphor	0.09
26.764	Hydrocinnamaldehyde	0.19
27.337	Unidentified	0.00
27.468	Borneol	0.06
27.627	2-Methylbenzofuran	0.02
28.071	Terpinen-4-ol	0.25
28.492	Cryptone	0.03
29.071	alpha-Terpineol	0.36
29.165	Unidentified	0.01
29.613	alpha-Phellandrene epoxide	0.03
29.866	Decanal	0.01
30.026	Unidentified	0.01
30.654	cis-Cinnamaldehyde	0.39
31.421	Hydrocinnamic alcohol	0.01
31.966	2-Methoxy-benzaldehyde	0.02
34.678	trans-Cinnamaldehyde	71.72
35.531	Saffrole	0.01
36.064	Thymol	0.02
36.571	trans-Cinnamyl alcohol	0.01
39.596	Eugenol	3.05
40.678	Hydrocinnamyl acetate	0.06
41.186	alpha-Copaene	0.22
41.917	Unidentified	0.01
42.077	beta-Elemene	0.01
42.735	Methyleugenol	0.01
43.041	cis-Caryophyllene	0.01
43.990	trans-beta-Caryophyllene	2.20

Chromatogram Cinnamon Bark Oil - Barefut



Comments:

The analysis of this Cinnamon Bark batch sample meets the expected chemical profile for authentic essential oil of *Cinnamomum zeylanicum*. 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%
45.578	trans-Cinnamyl acetate	2.98
46.074	Unidentified	0.01
46.230	alpha-Humulene	0.36
47.821	alpha-Curcumene	0.01
48.443	Unidentified	0.01
48.730	alpha-Selinene	0.00
48.904	alpha-Murolene	0.00
50.081	delta-Cadinene	0.03
50.272	trans-Calamenene	0.02
50.561	ortho-Methoxycinnamaldehyde	0.13
51.429	alpha-Calacorene	0.02
53.462	Caryophyllene alcohol	0.03
53.837	Caryophyllene oxide	0.15
54.493	Unidentified	0.02
55.455	Humulene epoxide II	0.02
55.709	Tetradecanal	0.06
58.041	Unidentified	0.01
58.865	Unidentified	0.01
64.071	Benzyl benzoate	0.38
75.063	Unidentified	0.01
81.145	Unidentified	0.01
		100.00