

Sample Information

Analyzed by : Dr. Robert S. Pappas
 Analyzed : 3/4/2019 7:32:49 PM
 Sample Type : Essential Oil
 Sample Name : Helichrysum, France - Barefut
 Sample ID : 0104
 Injection Volume : 0.10
 Instrument ID : GC-4

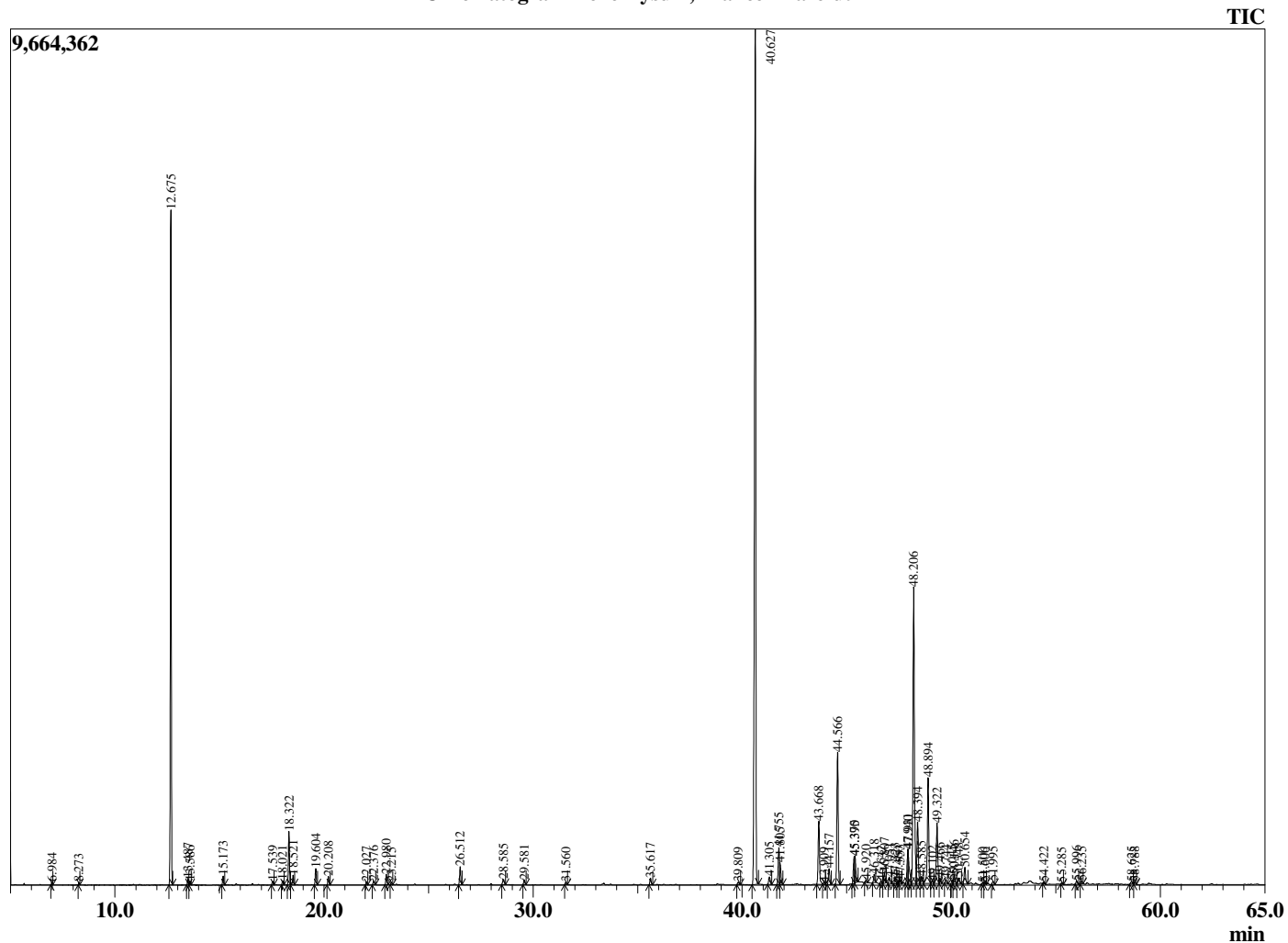


Peak Report TIC

R.Time	Name	Area%
6.984	2-Methyl-2-heptene	0.06
8.273	4-Methyl 3-hexanone	0.06
12.675	alpha-Pinene	17.85
13.487	alpha-Fenchene	0.17
13.586	Camphene	0.10
15.173	beta-Pinene	0.25
17.539	alpha-Terpinene	0.12
18.021	para-Cymene	0.13
18.322	Limonene	1.62
18.521	1,8-Cineole	0.31
19.604	Isobutyl angelate	0.50
20.208	gamma-Terpinene	0.27
22.027	Terpinolene	0.10
22.376	Isobutyl tiglate	0.15
22.980	Linalool	0.34
23.215	2-Methylbutyl 2-methylbutyrate	0.08
26.512	Isoamyl tiglate	0.60
28.585	Italidione	0.23
29.581	alpha-Terpineol	0.16
31.560	Nerol	0.08
35.617	Hexyl angelate	0.24
39.809	alpha-Terpinyl acetate	0.10
40.627	Neryl acetate	33.99
41.305	Cyclosativene	0.35
41.755	alpha-Copaene	1.49
41.805	Isotalicene	0.69
43.668	Italicene	2.66
43.909	Italicene isomer	0.07
44.157	cis-alpha-Bergamotene	0.62
44.566	beta-Caryophyllene	5.19
45.370	Italidione	0.94
45.395	trans-alpha-Bergamotene	0.94
45.920	Unidentified	0.09
46.318	Neryl propionate	0.30
46.642	trans-beta-Farnesene	0.08
46.807	alpha-Humulene	0.41
47.051	Unidentified	0.25
47.323	alpha-Acoradiene	0.21
47.460	Unidentified	0.08
47.553	beta-Acoradiene	0.17
47.931	Unidentified	1.01
47.940	Italidione	1.12
48.206	gamma-Curcumene	12.91
48.394	Ar-Curcumene	2.64
48.585	Farnesene isomer	0.39
48.894	beta-Selinene	4.52
49.102	trans-Murrola-4(14),5-diene	0.13
49.322	alpha-Selinene	2.57
49.466	alpha-Murolene	0.20
49.744	delta-Amorphene	0.15
50.045	beta-Bisabolene	0.15
50.146	beta-Curcumene	0.38
50.348	gamma-Cadinene	0.27
50.654	delta-Cadinene	0.71
51.500	trans-Cadina-1,4-diene	0.06
51.606	Unidentified	0.07
51.995	Unidentified	0.12
54.422	Caryophyllene oxide	0.05
55.285	Unidentified	0.05
55.996	Unidentified	0.13
56.235	Eudesm-5-en-11-ol	0.09
58.625	Unidentified	0.11
58.788	Unidentified	0.09
		100.00

This report is valid for 1 year from the analyzed date.

Chromatogram Helichrysum, France - Barefut



Comments:

The analysis of this Helichrysum, France batch sample meets the expected chemical profile for authentic essential oil of *Helichrysum italicum*. No contamination or adulteration was detected.