



Aromatic Plant Research Center

We provide uncompromising
quality control for your products.

Customer : doTERRA International
Lot Number : 231941
Date Filled : 07/13/2023

Column : ZB5 (60 m length × 0.25 mm inner diameter × 0.25 µm film thickness)
Instrument : Shimadzu GCMS-QP2010 Ultra
Carrier gas : Helium 80 psi
Temperature ramp : 2 degrees celsius per minute up to 260-degrees celsius
Split ratio : 30:1
Sample preparation : 5%w/v solution with Dichloromethane.



Comments:

The analysis of this Basil lot revealed no contaminants or adulteration.
The sample meets the expected chemical profile for authentic essential oils of *Ocimum basilicum*.

Analysied by : Ambika Poudel
Reviewed by : Dr. Prabodh Satyal



© Copyright 2023 Aromatic Plant Research Center. All rights reserved. Any publishing, copying, use, dissemination, or distribution of this report, including online, without the express written permission of Aromatic Plant Research Center is strictly prohibited.

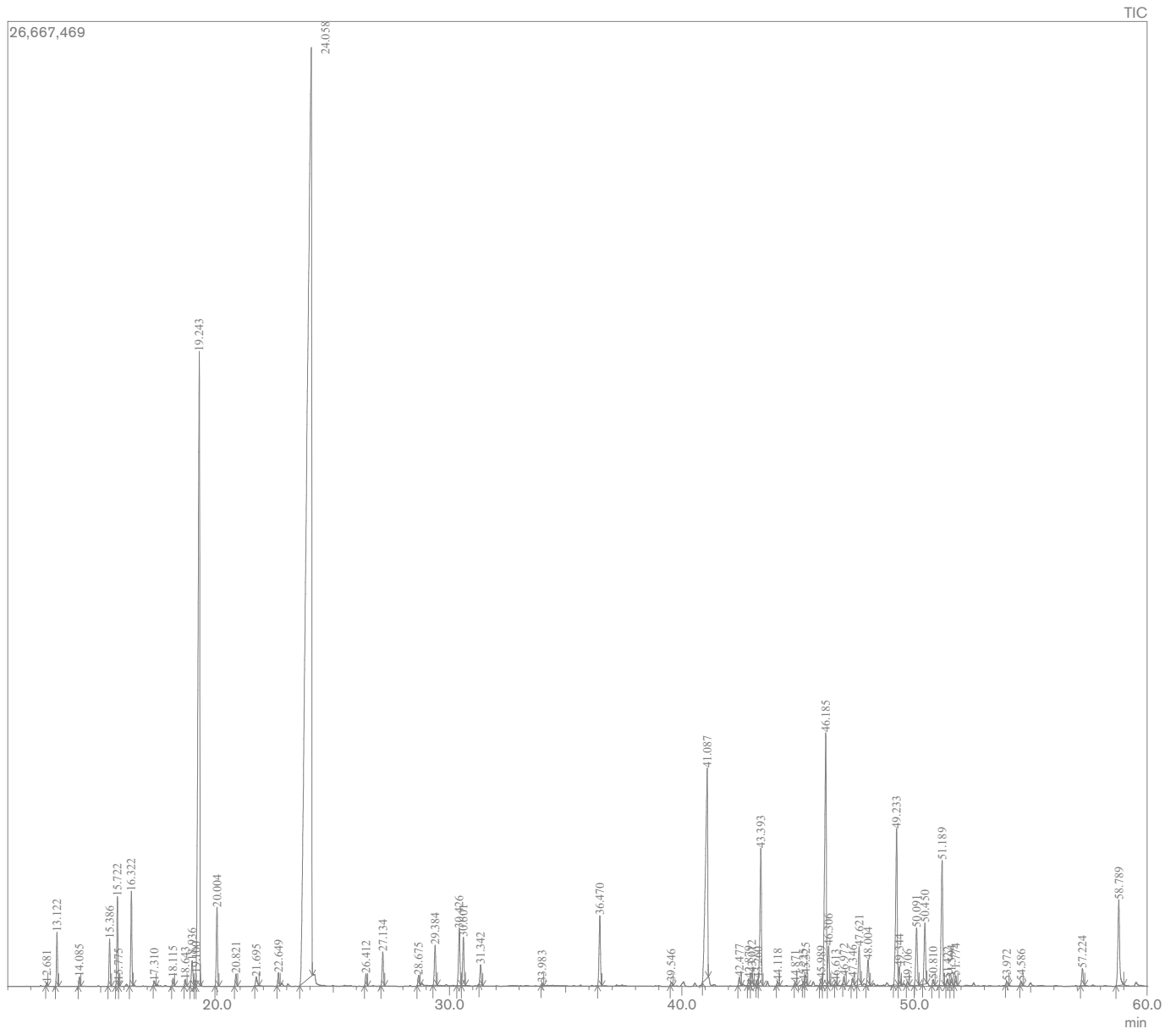
Basil Essential Oil

Customer : doTERRA International

Lot Number : 231941

Date Filled : 07/13/2023

Chromatogram



© Copyright 2023 Aromatic Plant Research Center. All rights reserved. Any publishing, copying, use, dissemination, or distribution of this report, including online, without the express written permission of Aromatic Plant Research Center is strictly prohibited.

Peak Report

Peak#	R.Time	Name	Area%
1	12.681	alpha-Thujene	0.04
2	13.122	alpha-Pinene	0.62
3	14.085	Camphene	0.11
4	15.386	Sabinene	0.59
5	15.722	beta-Pinene	1.13
6	15.775	1-Octen-3-ol	0.02
7	16.322	Myrcene	1.19
8	17.310	Hexenyl acetate	0.07
9	18.115	alpha-Terpinene	0.10
10	18.643	para-Cymene	0.09
11	18.936	Limonene	0.44
12	19.100	beta-Phellandrene	0.10
13	19.243	1,8-Cineole	12.23
14	20.004	trans-beta-Ocimene	1.06
15	20.821	gamma-Terpinene	0.16
16	21.695	cis-Sabinene hydrate	0.16
17	22.649	Terpinolene	0.17
18	24.058	Linalool	51.37
19	26.412	trans-Myroxide	0.17
20	27.134	Camphor	0.50
21	28.675	delta-Terpineol	0.15
22	29.384	Terpinen-4-ol	0.62
23	30.426	alpha-Terpineol	0.96
24	30.601	Methyl chavicol	0.75
25	31.342	Octyl acetate	0.30
26	33.983	Linalyl acetate	0.03
27	36.470	Bornyl acetate	1.11
28	39.546	delta-Elementene	0.05
29	41.087	Eugenol	5.37
30	42.477	alpha-Copaene	0.14
31	42.879	cis-beta-Elementene	0.11
32	43.012	beta-Bourbonene	0.21
33	43.260	beta-Cubebene	0.09
34	43.393	trans-beta-Elementene	2.35
35	44.118	Methyl eugenol	0.06
36	44.871	cis-alpha-Bergamotene	0.04
37	45.225	beta-Ylangene	0.05
38	45.325	beta-Caryophyllene	0.17
39	45.989	beta-Copaene	0.13
40	46.185	trans-alpha-Bergamotene	4.87
41	46.306	alpha-Guaiene	0.70
42	46.613	cis-beta-Farnesene	0.05
43	46.972	trans-Muurolo-3,5-diene	0.12
44	47.346	trans-beta-Farnesene	0.12
45	47.621	alpha-Humulene	0.64
46	48.004	cis-Muurolo-4(14),5-diene	0.41
47	49.233	Germacrene D	2.85
48	49.344	trans-beta-Bergamotene	0.29
49	49.706	beta-Selinene	0.05
50	50.091	Bicyclogermacrene	1.02
51	50.450	alpha-Bulnesene	1.03
52	50.810	beta-Bisabolene	0.09
53	51.189	gamma-Cadinene	2.26
54	51.422	delta-Cadinene	0.10
55	51.594	trans-Calamenene	0.12
56	51.774	beta-Sesquiphellandrene	0.15
57	53.972	trans-Nerolidol	0.05
58	54.586	Maaliol	0.06
59	57.224	1,10-di-epi-Cubenol	0.29
60	58.789	epi-alpha-Cadinol	1.70
			100.00

