



## Aromatic Plant Research Center

We provide uncompromising  
quality control for your products.

**Customer** : doTERRA International  
**Lot Number** : 231493  
**Date Filled** : 05/29/2023

**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



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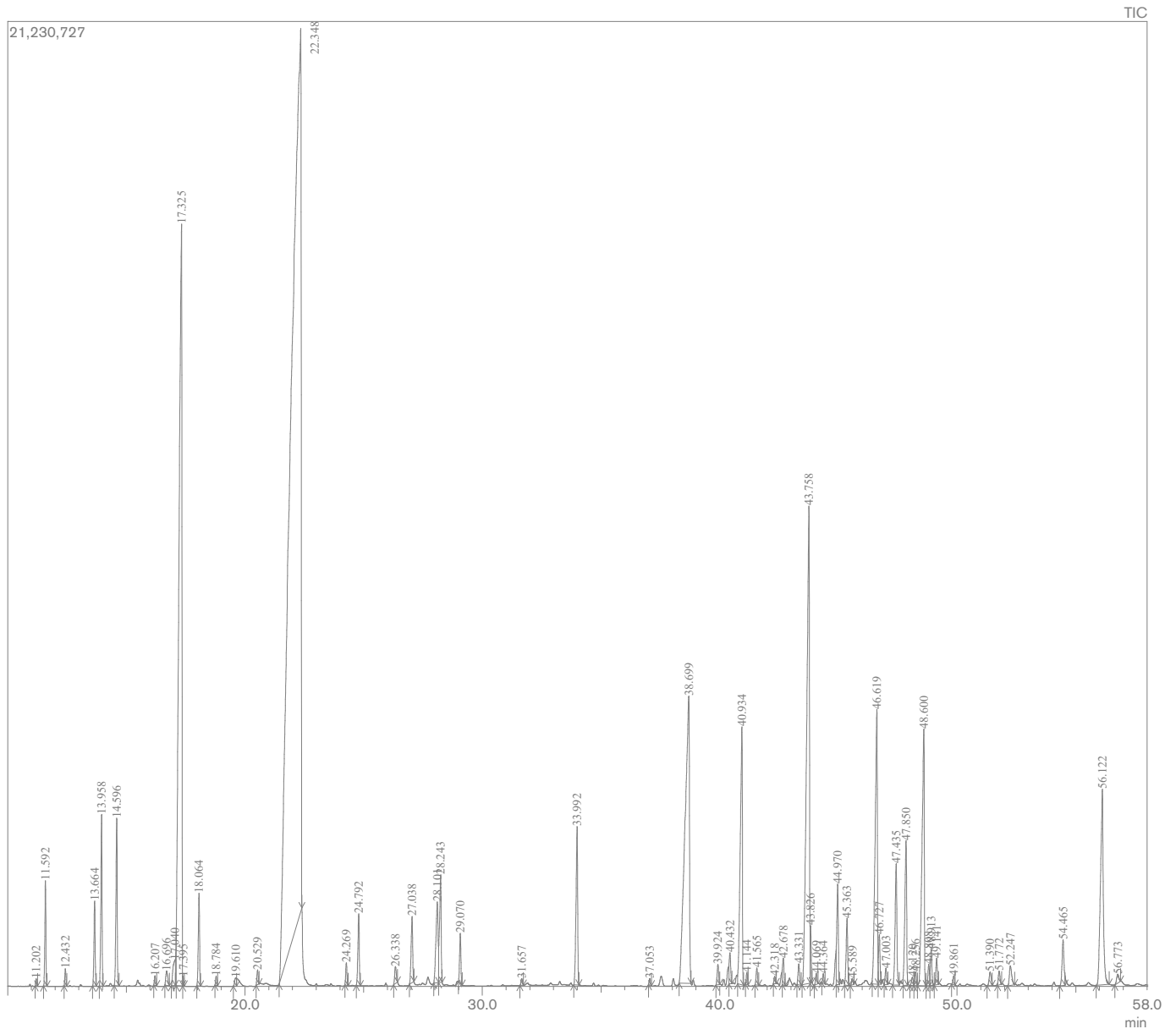
# Basil Essential Oil

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## Chromatogram



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## Peak Report

Peak#	R.Time	Name	Area%
1	11.202	alpha-Thujene	0.03
2	11.592	alpha-Pinene	0.56
3	12.432	Camphene	0.09
4	13.664	Sabinene	0.52
5	13.958	beta-Pinene	1.05
6	14.596	Myrcene	1.09
7	16.207	alpha-Terpinene	0.06
8	16.696	para-Cymene	0.15
9	17.040	Limonene	0.30
10	17.325	1,8-Cineole	11.38
11	17.395	cis-beta-Ocimene	0.04
12	18.064	trans-beta-Ocimene	0.59
13	18.784	gamma-Terpinene	0.05
14	19.610	cis-Sabinene hydrate	0.08
15	20.529	Terpinolene	0.09
16	22.348	Linalool	46.50
17	24.269	trans-Myroxide	0.14
18	24.792	Camphor	0.50
19	26.338	delta-Terpineol	0.14
20	27.038	Terpinen-4-ol	0.52
21	28.101	alpha-Terpineol	0.89
22	28.243	Methyl chavicol	0.90
23	29.070	Octyl acetate	0.33
24	31.657	Linalyl acetate	0.05
25	33.992	Bornyl acetate	1.30
26	37.053	delta-Elemene	0.04
27	38.699	Eugenol	6.51
28	39.924	alpha-Copaene	0.15
29	40.432	beta-Bourbonene	0.23
30	40.934	beta-Elemene	2.79
31	41.144	beta-Cubebene	0.07
32	41.565	Methyl eugenol	0.12
33	42.318	cis-alpha-Bergamotene	0.05
34	42.678	beta-Caryophyllene	0.19
35	43.331	beta-Copaene	0.17
36	43.758	trans-alpha-Bergamotene	6.76
37	43.826	alpha-Guaiene	0.27
38	44.069	cis-beta-Farnesene	0.08
39	44.364	trans-Muurolo-3,5-diene	0.06
40	44.970	alpha-Humulene	0.76
41	45.363	cis-Muurolo-4(14),5-diene	0.53
42	45.589	beta-Acoradiene	0.04
43	46.619	Germacrene D	3.18
44	46.727	trans-beta-Bergamotene	0.36
45	47.003	beta-Selinene	0.12
46	47.435	Bicyclogermacrene	1.10
47	47.850	alpha-Bulnesene	1.34
48	48.120	Germacrene A	0.07
49	48.256	beta-Bisabolene	0.11
50	48.600	gamma-Cadinene	3.00
51	48.808	delta-Cadinene	0.17
52	48.913	trans-Calamenene	0.27
53	49.141	beta-Sesquiphellandrene	0.20
54	49.861	alpha-Cadinene	0.07
55	51.390	trans-Nerolidol	0.14
56	51.772	Maaliol	0.12
57	52.247	Spathulenol	0.23
58	54.465	1,10-Di-epi-cubenol	0.44
59	56.122	epi-alpha-Cadinol	2.81
60	56.773	alpha-Cadinol	0.10
			100.00

