



## Aromatic Plant Research Center

We provide uncompromising  
quality control for your products.

**Customer** : doTERRA International  
**Lot Number** : 231012  
**Date Filled** : 04/11/2023

**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 Myrrh lot revealed no contaminants or adulteration.  
The sample meets the expected chemical profile for authentic essential oils of Commiphora myrrha.

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



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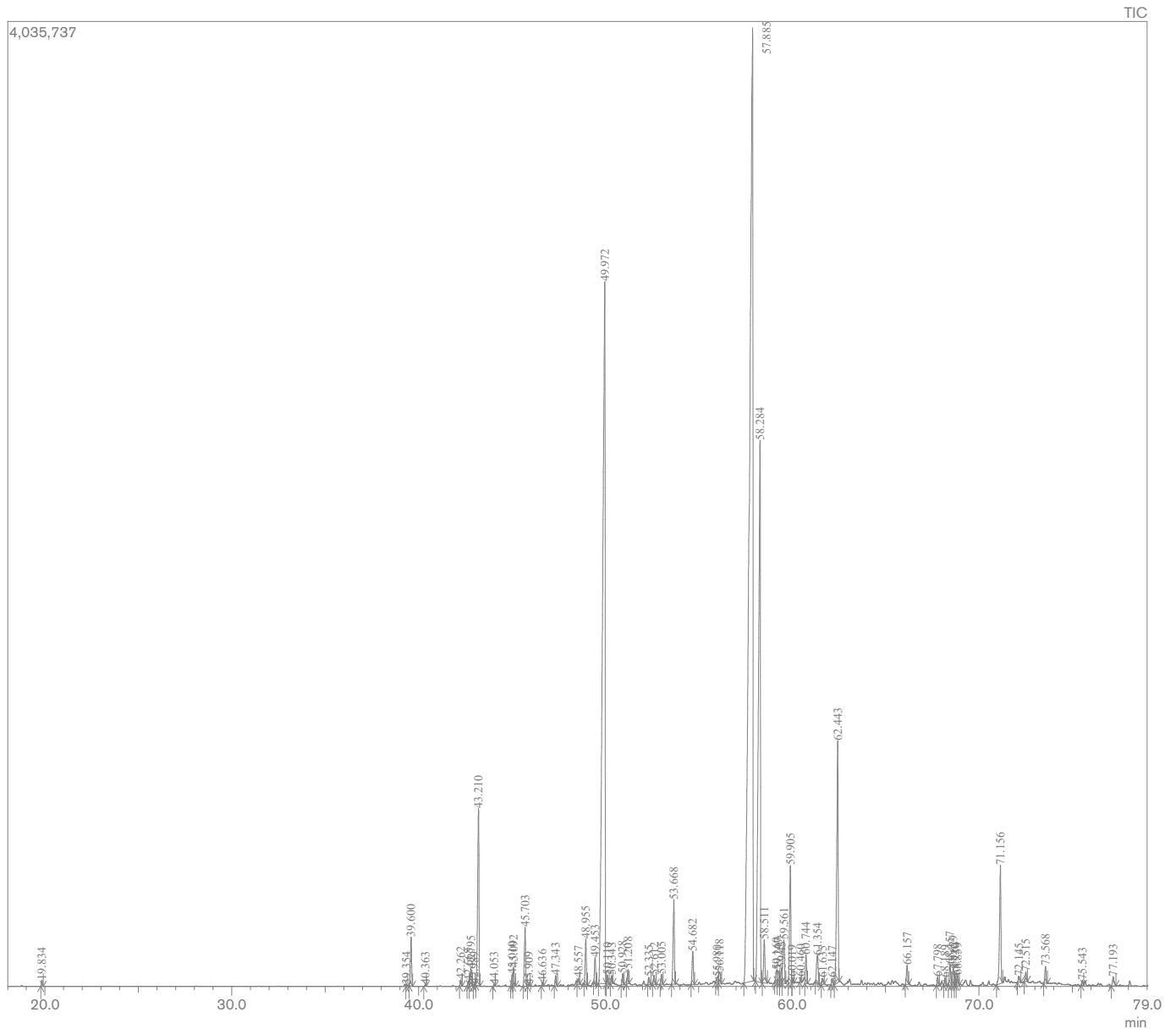
# Myrrh Essential Oil

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## Chromatogram



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## Peak Report

Peak#	R.Time	Name	Area%
1	19.834	trans-beta-Ocimene	0.07
2	39.354	Bicycloelemene	0.02
3	39.600	delta-Elemene	0.69
4	40.363	alpha-Cubebene	0.02
5	42.262	alpha-Copaene	0.09
6	42.668	cis-beta-Elemene	0.07
7	42.795	beta-Bourbonene	0.26
8	42.989	alpha-Bourbonene	0.02
9	43.210	trans-beta-Elemene	2.92
10	44.053	beta-Maaliene	0.02
11	45.010	beta-Ylangene	0.17
12	45.092	beta-Caryophyllene	0.27
13	45.703	gamma-Elemene	0.92
14	45.909	trans-alpha-Bergamotene	0.02
15	46.636	Isogermacrene D	0.04
16	47.343	alpha-Humulene	0.15
17	48.557	trans-Cadina-1(6),4-diene	0.09
18	48.955	Germacrene D	0.67
19	49.453	beta-Selinene	0.37
20	49.972	Curzerene	22.32
21	50.110	alpha-Murolene	0.13
22	50.343	beta-Cadinene	0.11
23	50.928	gamma-Cadinene	0.15
24	51.208	delta-Cadinene	0.19
25	52.335	3,9-Guaiadiene	0.11
26	52.612	Selina-3,7(11)-diene	0.14
27	53.005	alpha-Elemol	0.14
28	53.668	Germacrene B	1.29
29	54.682	Furanodiene	0.51
30	55.980	trans-beta-Elemenone	0.13
31	56.118	Curzerenone	0.23
32	57.885	Furanoedesma-1,3-diene	40.71
33	58.284	Lindestrene	12.86
34	58.511	epi-alpha-Cadinol	0.75
35	59.160	Dihydro furanodiene	0.18
36	59.247	alpha-Eudesmol	0.21
37	59.437	Selin-11-en-4-alpha-ol	0.25
38	59.561	Atractylone	0.87
39	59.905	Intermedeol	1.88
40	60.019	Isospathulenol	0.07
41	60.460	Furanoedesmadiene	0.07
42	60.744	2-Methoxy furanodiene A	0.41
43	61.354	Germacrone	0.56
44	61.635	Eudesm-7(11)-en-4-ol	0.10
45	62.147	Myrrh sesquiterpenoid 1	0.10
46	62.443	2-Methoxy furanodiene B	4.36
47	66.157	Agarospirol acetate	0.31
48	67.798	Epoxy furanodiene	0.13
49	68.189	Myrrh sesquiterpenoid 2	0.11
50	68.457	Furanoedesmadiene isomer 1	0.33
51	68.629	Myrrh sesquiterpenoid 3	0.33
52	68.720	Myrrh sesquiterpenoid 4	0.12
53	68.859	Furanoedesmadiene isomer 2	0.18
54	71.156	2-Acetoxy furanodiene	2.01
55	72.145	Myrrh sesquiterpenoid 5	0.10
56	72.515	Myrrh sesquiterpenoid 6	0.14
57	73.568	Myrrh sesquiterpenoid 7	0.26
58	75.543	Furanoedesmadiene isomer 3	0.08
59	77.193	Myrrh sesquiterpenoid 8	0.17
			100.00

