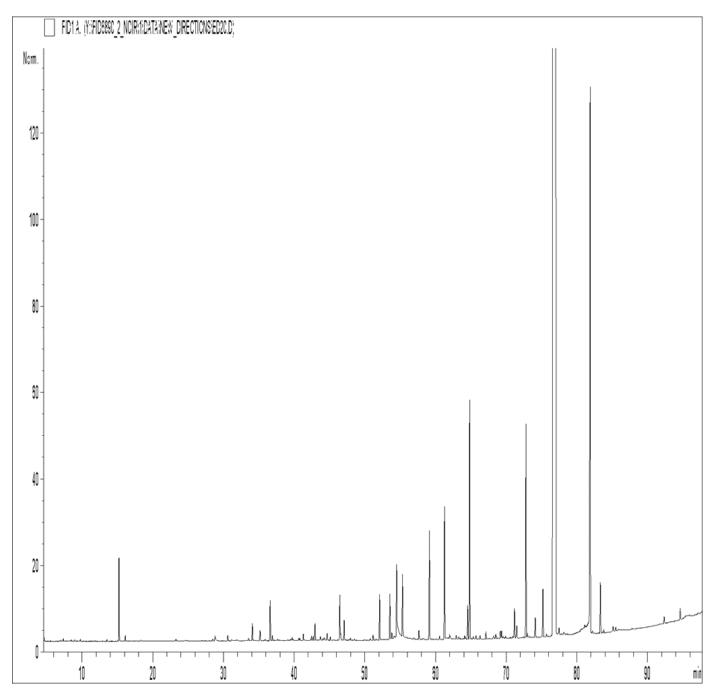


# GCMS ANALYSIS

#### PRODUCT NAME: CALAMUS ROOT ESSENTIAL OIL – 11016 DATE: March 24, 2021



Due to volume turnover, this report is not lot specific, It is representative of the quality of this oil produced by the manufacturer of this product, Specific lots may vary slightly as is the case in natural products,





## GCMS ANALYSIS (cont'd,)

## PRODUCT NAME: CALAMUS ROOT ESSENTIAL OIL - 11016

Peak	RT (min)	Compound name	%
1	4,68	ACETONE	0,01
2	7,35	alpha-PINENE	0,01
3	9,77	beta-PINENE	0,01
4	13,50	LIMONENE	0,01
5	15,00	FURAN, 2-PENTYL-	0,01
6	15,22	cis-beta-OCIMENE	0,29
7	16,12	trans-beta-OCIMENE	0,02
8	18,30	OCTANAL	0,01
9	23,27	ALLO-OCIMENE	0,02
10	28,49	alpha-CUBEBENE	0,01
11	28,80	FURFURAL	0,05
12	30,62	alpha-COPAENE	0,03
13	31,15	DECANAL	0,02
14	31,88	CAMPHOR	0,01
15	33,57	beta1-CUBEBENE	0,01
16	34,09	LINALOOL	0,07
17	35,18	ARISTOLENE	0,05
18	35,93	BORNYL ACETATE	0,02
19	36,60	CALARENE	0,15
20	36,62	beta-ELEMENE	0,05
21	36,94	beta-CARYOPHYLLENE	0,03
22	37,64	AROMADENDRENE	0,01
23	39,72	COMPOUND Mw=202	0,02
24	39,87	ALLO-AROMADENDRENE	0,01
25	40,64	ZONARENE	0,01
26	40,78	alpha-HUMULENE	0,01
27	41,32	E-beta-FARNESENE	0,03
28	42,47	gamma-MUUROLENE	0,02
29	42,71	SESQUITERPENE	0,02
30	42,96	LEDENE	0,08

#### **Disclaimer & Caution**

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## GCMS ANALYSIS (cont'd,)

## PRODUCT NAME: CALAMUS ROOT ESSENTIAL OIL - 11016

Peak	RT (min)	Compound name	%
31	43,72	GERMACRENE D	0,02
32	44,04	MUROLADIENE ISOMER	0,01
33	44,25	beta-SELINENE	0,02
34	44,50	alpha-SELINENE	0,01
35	44,67	alpha-MUUROLENE	0,04
36	45,13	BICYCLOGERMACRENE	0,02
37	46,47	delta-CADINENE	0,22
38	46,59	gamma-CADINENE	0,03
39	47,08	ACETOXYFURALDEHYDE COMPOUND	0,10
40	47,99	CADINA-1,4-DIENE	0,01
41	48,55	alpha-AMORPHENE	0,01
42	50,79	CALAMENENE	0,01
43	51,18	DEHYDRO CYCLOISOLONGIFOLENE ISO, Mw=202	0,03
44	52,09	6-EPISHYOBUNONE	0,23
45	53,55	ISOSHYOBUNONE	0,23
46	53,82	SESQUITERPENIC EPOXIDE	0,05
47	54,51	SHYOBUNONE	1,08
48	55,34	alpha-CALACORENE	0,32
49	56,96	CUBEBOL	0,01
50	57,66	beta-CALACORENE	0,06
51	59,00	CARYOPHYLLENE EPOXIDE	0,01
52	59,15	DEHYDRO CYCLOISOLONGIFOLENE ISOMER Mw=202	0,56
53	60,58	E-METHYLEUGENOL	0,02
54	61,28	SESQUITERPENIC EPOXIDE	0,72
55	62,02	epi-CUBENOL	0,04
56	62,94	OCTAHYDRO METHYLPHENANTHRENE ISOMERE Mw=200	0,02
57	63,33	CUBENOL	0,01
58	64,13	ELEMOL	0,02
59	64,56	SESQUITERPENIC KETONE Mw=220	0,17
60	64,84	cis-METHYLISOEUGENOL	1,13

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## GCMS ANALYSIS (cont'd,)

## PRODUCT NAME: CALAMUS ROOT ESSENTIAL OIL - 11016

Peak	RT (min)	Compound name	%
61	65,34	SESQUITERPENOL	0,01
62	65,75	SESQUITERPENIC EPOXIDE	0,02
63	66,32	SPATHULENOL	0,02
64	67,15	SESQUITERPENOL	0,04
65	68,24	SESQUITERPENONE Mw=218	0,02
66	68,54	T-CADINOL	0,03
67	69,17	trans-METHYLISOEUGENOL	0,05
68	69,35	alpha-MUUROLOL	0,04
69	69,58	delta-CADINOL	0,03
70	69,91	CADALENE	0,03
71	71,18	ELEMICIN	0,15
72	71,49	alpha-CADINOL	0,07
73	72,80	cis-ISOELEMICIN	1,05
74	73,00	SESQUITERPENOL	0,02
75	74,11	trans-ISOELEMICIN	0,10
76	75,20	AROMATIC COMPOUND	0,25
77	75,73	SESQUITERPENOL	0,03
78	76,39	AROMATIC COMPOUND	0,01
79	77,02	beta-ASARON	87,26
80	77,48	AROMATIC COMPOUND	0,08
81	78,16	AROMATIC COMPOUND	0,02
82	81,13	SESQUITERPENONE Mw=218	0,02
83	81,88	alpha-ASARON	3,85
84	82,22	SESQUITERPENIC EPOXIDE	0,02
85	83,33	HYDROXY PYRIMIDIC COMPOUND	0,28
86	83,82	SESQUITERPENONE	0,02
87	85,13	METHOXY EUGENOL	0,03
88	85,51	DIMETHOXY PROPIOPHENONE Mw=194	0,02
89	92,35	AROMATIC COMPOUND Mw=224	0,04
90	94,62	BENZALDEHYDE, 2,5,5-TRIMETHOXY	0,07
		TOTAL	99,99

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