

# Certificate of Analysis

Analysed essential oil: **Myrrh**

Analysis date : August, 28<sup>th</sup> 2015

Batch : 239DB501

Shelf life : September 2018

## ❖ General description

Essential oil	Myrrh	Origin	Somalia
Latin name	<i>Commiphora myrrha</i> Engler		

## ❖ Organoleptic characteristics

Appearance	Clear and mobile liquid
Colour	Brownish yellow
Odour	Characteristic

## ❖ Physico-chemical characteristics

	Results (at 20°C)	Technical specifications				
Specific gravity	1.019	0.970	<	d	<	1.040
Refractive index	1.5260	1.4900	<	IR	<	1.5310
Optical rotation	ND	-120°	<	$[\alpha]^{20}_D$	<	-30°

## ❖ Volatile elucidation

GC : Perkin Elmer – Clarus 500

Column : Elite - 1, 30 m, Ø 0.25 mm, 0.25 µm df

Injection : split

Detector : FID

Carrier gas : H<sub>2</sub>

⇒ See Chromatogram : non-polar column

Date : 2015-08-28

Software Version : 6.2.0.0.0:B27  
Sample Name : Myrrhe  
Instrument Name : CLARUS 500  
Rack/Vial : 0/4  
Sample Amount : 1.000000  
Cycle : 4

Date : 28/08/2015 11:50:47  
Data Acquisition Time : 27/08/2015 22:31:00  
Channel : A  
Operator : Davenne  
Dilution Factor : 1.000000

Result File :  
Sequence File : C:\Sequences\CPG\2015\150827.seq

## Rapport d'analyse

colonne apolaire

Pic #	Component Name	TR [min]	Area [%]
1	ocimene <(E)-beta>	14.55	0.05
2	elemene <delta>	27.61	0.67
3		28.16	0.03
4		29.06	0.02
5	copaene <alpha>	29.25	0.06
6	bourbonene <beta>	29.53	0.31
7	elemene <beta>	29.83	4.21
8		30.20	0.03
9		30.63	0.02
10	caryophyllene <(E)>	30.90	0.36
11		31.06	0.14
12		31.32	0.07
13	elemene <gamma>	31.46	0.75
14		31.68	0.05
15		31.88	0.07
16	humulene <alpha>	32.20	0.18
17		32.52	0.07
18		32.76	0.02
19		32.90	0.04
20		33.13	0.23
21	germacrene D	33.28	0.89
22	selinene <beta>	33.49	0.53
23	curzerene	33.79	23.67
24	selinene <alpha>	33.97	0.70
25		34.14	0.30
26		34.26	0.15
27	cadinene <gamma>	34.54	0.25
28	cadinene <delta>	34.91	0.22
29		35.39	0.16
30		35.66	0.26
31	germacrene B	36.19	2.54
32		36.61	0.55
33		36.83	0.09
34		37.04	0.07
35		37.19	0.13
36		37.32	0.10
37		37.50	0.30
38		37.78	0.18
39		38.02	0.17
40		38.22	0.26
41	furanoedesma-1,3-diene	38.60	29.00
42	lindestrene	38.83	9.48
43	cadinol <epi-alpha>	39.06	1.21
44		39.27	0.40
45		39.49	0.99
46	atractylone	39.75	1.23
47		40.04	0.31
48		40.22	0.59
49		40.49	1.58
50		40.70	1.63
51		40.84	1.51
52		41.29	0.18
53	methoxyfuranogermacrene	41.77	5.72
54		42.25	0.02
55		42.57	0.05
56		42.75	0.03
57		42.95	0.04
58		43.18	0.09

28/08/2015 11:50:47 Result:

Pic #	Component Name	TR [min]	Area [%]
59		43.37	0.22
60		43.80	0.09
61		43.98	0.06
62		44.15	0.35
63		44.37	0.14
64		44.60	0.16
65		44.79	0.14
66		44.97	0.11
67		45.13	0.07
68		45.40	0.30
69		45.54	0.52
70		45.72	0.06
71		45.93	0.12
72		46.12	0.06
73		46.32	0.13
74		46.52	0.12
75		46.85	0.13
76		47.09	2.10
77		47.24	0.17
78		47.49	0.30
79		47.70	0.04
80		47.95	0.02
81		48.14	0.07
82		48.76	0.24
83		49.01	0.05
84		49.22	0.12
85		49.64	0.16
86		49.82	0.39
87		49.96	0.03
88		50.29	0.16
89		50.43	0.04
90		50.73	0.16
91		51.47	0.01
92		51.66	0.05
93		52.49	0.02
94		52.96	0.03
95		53.55	0.04
96		53.78	0.02
97		54.64	0.03
98		55.22	0.04
99		56.23	0.01
100		58.17	0.02
101		59.06	0.02
			100.00

Chromatogram

Sample Name : Myrrhe      Sample #: 239DB501      Page 1 of 1  
FileName : C:\Data\Colonne Apolaire\Huiles Essentielles\Myrrhe\2015\myrrhe 150827 239db501.raw  
Date : 28/08/2015 11:50:49      Time of Injection: 27/08/2015 22:31:00  
Method : myrrhe.mth      End Time : 82.00 min      Low Point : -47.23 mV      High Point : 993.88 mV  
Plot Offset: -47.23 mV      Plot Scale: 1041.1 mV

