

Certificate of Analysis

Analysed essential oil : Ravintsara

Analysis date : July, 16th 2015

Batch : 191BR501

Shelf life : January 2018

❖ General description

Essential oil	Ravintsara		Madagascar
Latin name	<i>Cinnamomum camphora</i>		

❖ Organoleptic characteristics

Appearance	Clear and mobile liquid
Colour	Colourless
Odour	Fresh, cinéolée, aromatic

❖ Physico-chemical characteristics

	Results (at 20°C)	Technical specifications				
Specific gravity	0.902	0.900	<	d	<	0.915
Refractive index	1.4633	1.4600	<	IR	<	1.4700
Optical rotation	-19.50°	-25°	<	$[\alpha]^{20}_d$	<	-10°

❖ 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 : H₂

⇒ See Chromatogram : non-polar column

Date : 2015-07-16

Software Version : 6.2.0.0.0:B27
 Sample Name : Ravintsara
 Instrument Name : CLARUS 500
 Rack/Vial : 0/6
 Sample Amount : 1.000000
 Cycle : 6

Date : 16/07/2015 10:24:57
 Data Acquisition Time : 16/07/2015 01:52:23
 Channel : A
 Operator : Davenne
 Dilution Factor : 1.000000

Result File :
 Sequence File : C:\Sequences\CPG\2015\150715.seq

Rapport d'analyse

colonne apolaire

Pic #	Component Name	TR [min]	Area [%]
1	thujene <alpha>	9.73	0.75
2	pinene <alpha>	9.99	4.56
3	camphene	10.48	0.18
4	sabinene	11.44	13.29
5	pinene <beta>	11.58	3.40
6		11.98	0.03
7	myrcene	12.19	1.26
8	phellandrene <alpha>	12.71	0.03
9	terpinene <alpha>	13.26	0.31
10	cymene <p>	13.41	0.70
11	cineole<1.8>+limonene+phelland	13.77	57.46
12		14.16	0.15
13	ocimene <(E)-beta>	14.62	0.21
14	terpinene <gamma>	15.06	0.58
15	sabinene hydrate <cis>	15.20	0.76
16	terpinolene	16.39	0.19
17	sabinene hydrate <trans>	16.52	0.55
18		16.69	0.05
19		17.60	0.09
20		18.36	0.06
21		18.48	0.02
22	borneol	19.44	0.73
23		19.83	0.04
24	terpinen-4-ol	20.08	1.74
25	terpineol <alpha>	20.62	7.50
26		20.93	0.08
27		21.42	0.03
28	nerol	22.40	0.08
29		23.69	0.06
30		24.38	0.04
31		25.98	0.05
32		29.14	0.01
33	elemene <beta>	29.87	0.09
34	caryophyllene <(E)>	30.99	0.64
35		31.79	0.02
36	humulene <alpha>	32.30	0.69
37		33.20	0.03
38	germacrene D	33.34	0.23
39	selinene <beta>	33.55	0.17
40	selinene <alpha> + bicyclogerm	33.97	0.42
41		34.27	0.03
42		34.97	0.02
43	germacrene B	36.23	0.07
44		36.71	0.03
45		36.90	0.04
46		37.59	0.02
47		37.83	0.04
48		38.90	0.05
49		67.43	0.07
50		68.16	0.13
51		69.74	0.95
52		71.33	1.26

100.00

Chromatogram

Sample Name : Ravintsara Sample #: 191BR501 Page 1 of 1
FileName : C:\Data\Colonne Apolaire\Huiles Essentielles\Ravintsara\2015\ravintsara 150715.raw
Date : 16/07/2015 10:25:00
Method : Ravintsara.mth Time of Injection: 16/07/2015 01:52:23
Start Time : 0.00 min End Time : 82.00 min Low Point : -47.22 mV High Point : 993.88 mV
Plot Offset: -47.22 mV Plot Scale: 1041.1 mV

