

Certificate of Analysis

Analysed essential oil: Bergamot (bergapten free)

Analysis date : March, 30th 2017

Batch : 086BA703

Shelf life : September 2018

❖ General description

Essential oil	Bergamot (bergapten-free)	Origin	Italy
Latin name	<i>Citrus aurantium</i> L. ssp <i>bergamia</i>		

❖ Organoleptic characteristics

Appearance	Clear and mobile liquid
Colour	Light yellow
Odour	Characteristic

❖ Physico-chemical characteristics

	Results (at 20°C)	Technical specifications				
Specific gravity	0.874	0.865	<	d	<	0.885
Refractive index	1.4612	1.4605	<	IR	<	1.4655
Optical rotation	+27,95°	+15°	<	$[\alpha]^{20}_d$	<	+32°
Peroxyd index	13.1 mmol/L	0 mmol/L	<	IP	<	20 mmol/L

❖ Volatile elucidation

GC : Perkin Elmer – Clarus 500

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

Injection : split

Detector : FID

Carrier gas : H₂

⇒ See Chromatogram : polar column

Date : 2017-03-30

Software Version : 6.3.2.0646
Sample Name : Bergamote sans bergapten 086BA703
Instrument Name : CLARUS 500
Rack/Vial : 0/3
Sample Amount : 1.000000
Cycle : 3

Date : 3/29/2017 3:46:12 PM
Data Acquisition Time : 3/27/2017 9:05:34 PM
Channel : B
Operator : Clemence
Dilution Factor : 1.000000

Result File :
Sequence File : C:\Sequences\CPG\2017\170327.seq

Rapport d'analyse

colonne polaire Elite WAX

pic #	Nom composant	TR [min]	Aire [%]
1	pinene<alpha>+thujene<alpha>	3.10	1.35
2	pinene <beta>	4.50	7.30
3	sabinene	4.79	0.98
4	myrcene	5.88	1.11
5	terpinene <alpha>	6.17	0.51
6	limonene+?	6.77	38.60
7	phellandrene <beta>	6.90	0.20
8		7.89	0.08
9	terpinene <gamma>	8.09	8.57
10	ocimene <(E)-beta>	8.37	0.20
11	cymene <p>	8.77	0.41
12	terpinolene	9.21	0.42
13		9.44	0.03
14		13.09	0.04
15		16.18	0.03
16		16.31	0.12
17		16.96	0.06
18	linalool	19.06	11.68
19	linalool acetate	19.40	25.65
20	caryophyllene<E>+bergamotene<a	20.19	0.39
21		20.51	0.05
22		20.85	0.05
23		23.17	0.04
24		23.37	0.05
25	terpinyl acetate<alpha>	23.87	0.29
26		24.06	0.05
27	geranial	24.99	0.05
28	bisabolene <beta>	25.15	0.04
29	neryl acetate	25.26	0.59
30	geranyl acetate	26.35	0.70
31		26.72	0.05
32		27.71	0.06
33		76.84	0.25
			100.00

Laboratoire Rosier Davenne

Chromatogram

Sample Name : Bergamote sans bergapten 086BA703 Sample #: 086BA703 Page 1 of 1
FileName : C:\Data\Colonne Polaire\Huiles Essentielles\Bergamote\2017\bergamote sans bergaptene 170327.raw
Date : 3/29/2017 3:46:14 PM
Method : bergamote sans bergaptène.mth Time of Injection: 3/27/2017 9:05:34 PM
Start Time : 0.00 min End Time : 82.00 min Low Point : -47.16 mV High Point : 993.88 mV
Plot Offset: -47.16 mV Plot Scale: 1041.0 mV

