

Certificate of Analysis

Analysed essential oil: **Lemon**

Analysis date : June, 26th 2018

Batch : 176BA802

Shelf life : December 2019

❖ General description

Essential oil	Lemon	Origin	Italy
Latin name	Citrus limonum		

❖ Organoleptic characteristics

Appearance	Clear and mobile liquid
Colour	Yellow green
Odour	Characteristic

❖ Physico-chemical characteristics

	Results (at 20°C)	Technical specifications				
Specific gravity	0,854	0.850	<	d	<	0.858
Refractive index	1,4744*	1.4730	<	IR	<	1.4760
Optical rotation	+57,65°	+57°	<	$[\alpha]^{20}_d$	<	+70°
Peroxyd index	12,2 mmol/L	0 mmol/L	<	IP	<	20 mmol/L

❖ Volatile elucidation

GC : Perkin Elmer – Clarus 500

Column : Elite – WAX, 30m, Ø 0.25 mm, 0.25 µm df

Injection : split

Detector : FID

Carrier gas : H₂

⇒ See Chromatogram : polar column

Date : 09-13-2018

Software Version : 6.3.2.0646
Sample Name : HE Citron 176BA802
Instrument Name : CLARUS 500
Rack/Vial : 0/12
Sample Amount : 1.000000
Cycle : 12

Date : 6/26/2018 11:16:15 AM
Data Acquisition Time : 6/26/2018 6:49:04 AM
Channel : A
Operator : Clemence
Dilution Factor : 1.000000

Result File :
Sequence File : C:\Sequences\CPG\2018\180625.seq

Rapport d'analyse

colonne apolaire

Pic #	Component Name	TR [min]	Area [%]
1	thujene <alpha>	10.05	0.49
2	pinene <alpha>	10.32	2.07
3		10.68	0.01
4	camphene	10.82	0.07
5	sabinene	11.76	2.23
6	pinene <beta>	11.94	13.60
7	myrcene + octanal <n>	12.51	1.56
8	phellandrene <alpha>	13.06	0.03
9	terpinene <alpha>	13.59	0.17
10	cymene <p>	13.73	0.38
11	limonene + phellandrene <beta>	14.26	63.57
12		14.47	0.38
13	ocimene <(E)-beta>	14.95	0.09
14	terpinene <gamma>	15.43	10.19
15	terpinolene	16.72	0.30
16		16.87	0.01
17	linalool	16.95	0.06
18	citronellal	19.13	0.09
19	terpinen-4-ol	20.38	0.04
20	terpineol <alpha>	20.87	0.16
21		21.52	0.05
22		22.64	0.02
23	neral	22.82	0.99
24	geranial	24.08	1.46
25		28.01	0.05
26	neryl acetate	28.36	0.48
27	geranyl acetate	29.11	0.38
28	cyclocitral<alpha>	30.88	0.09
29	caryophyllene <(E)>	31.15	0.18
30	cyclocitral<beta>	31.70	0.23
31	bergamotene<alpha-trans>	31.88	0.13
32		34.49	0.02
33	bisabolene<beta>	34.59	0.19
34		40.56	0.02
35		45.40	0.09
36		49.06	0.03
37		55.17	0.03
38		59.40	0.02
39		64.16	0.05

100.00

Chromatogram

Sample Name : HE Citron 176BA802 Sample #: 176BA802 Page 1 of 1
FileName : C:\Data\Colonne Apolaire\Huiles Essentielles\Citron\2018\citron 180625.raw
Date : 6/26/2018 11:16:16 AM
Method : citron.mth Time of Injection: 6/26/2018 6:49:04 AM
Start Time : 0.00 min End Time : 82.00 min Low Point : -47.24 mV High Point : 993.88 mV
Plot Offset: -47.24 mV Plot Scale: 1041.1 mV

