Certificate of Analysis

Analysed essential oil : **Juniperberry (organic)**

Analysis date : December, 19th 2016
Batch : 351BK601
Shelf life : January 2020

❖ General description

Essential oil	Juniperberry	Origin	Bulgaria
Latin name	*Juniperus communis*		

❖ Organoleptic characteristics

Appearance	Clear and mobile liquid
Colour	Light yellow
Odour	Characteristic

❖ Physico-chemical characteristics

	Results (at 20°C)	Technical specifications				
Specific gravity	0.869	0.857	<	d	<	0.872
Refractive index	1.4754	1.4710	<	IR	<	1.4830
Optical rotation	-1,65°	-15°	<	$[\alpha]^{20}_D$	<	0°
Peroxide index	7,2 mmol/L	0 mmol/L	<	IP	<	10 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 : H_2

⇒ See Chromatogram : polar column

Date : 2016-12-19

Software Version	: 6.3.2.0646	Date	: 12/19/2016 4:16:42 PM
Sample Name	: Genevrier beies 351BK601	Data Acquisition Time	: 12/16/2016 12:33:38 PM
Instrument Name	: CLARUS 500	Channel	: B
Rack/Vial	: 0/1	Operator	: Charlene
Sample Amount	: 1.000000	Dilution Factor	: 1.000000
Cycle	: 1		

Result File :
Sequence File : C:\Sequences\CPG\2016\161216.seq

Rapport d'analyse

colonne polaire Elite WAX

pic #	Nom composant	TR [min]	Aire [%]
1	tricyclene	2.92	0.13
2	pinene <alpha> + thujene <alph	3.17	52.34
3	fenchene<alpha>	3.63	0.07
4	camphene	3.76	0.43
5	pinene <beta>	4.51	2.76
6	sabinene	4.82	4.32
7		5.03	0.04
8	carene <delta-3>	5.42	0.18
9	myrcene+phellandrene<alpha>	5.93	9.50
10	terpinene <alpha>	6.19	0.65
11	limonene	6.71	5.09
12	phellandrene <beta>	6.91	0.69
13	terpinene <gamma>	8.08	1.24
14	ocimene <(E)-beta>	8.39	0.04
15	cymene <p>	8.81	1.38
16	terpinolene	9.24	1.03
17		10.39	0.04
18		12.04	0.02
19		14.17	0.06
20		14.53	0.18
21	cubebene <alpha>	15.45	0.45
22		15.72	0.03
23		16.24	0.07
24	copaene <alpha>	16.54	0.47
25		16.89	0.02
26		17.99	0.04
27		18.30	0.04
28		18.62	0.27
29	linalool	19.06	0.18
30		19.21	0.02
31		19.43	0.06
32		19.57	0.09
33	bornyl acetate	19.73	0.34
34		20.02	0.12
35	caryophyllene<E>+elemene<beta>	20.20	3.43
36	terpinen-4-ol	20.56	1.62
37		20.81	0.04
38		20.99	0.10
39		21.48	0.03
40	elemene <gamma>	21.97	0.29
41		22.34	0.11
42	humulene <alpha>	22.71	2.04
43		23.11	0.10
44	farnesene <(E)-beta>	23.37	0.48
45	muurolene <gamma>	23.59	0.71
46		23.82	0.09
47	terpineol<alpha>+borneol	24.01	0.44
48	germacreneD	24.12	1.13
49		24.39	0.36
50		24.61	0.22
51	muurolene <alpha>	24.88	0.51
52		25.19	0.04
53		25.49	0.04
54	cadinene<delta>+cadinene<gamma	26.06	2.35
55		26.36	0.15
56		26.49	0.37
57		26.72	0.16

12/19/2016 4:16:42 PM Result:

pic #	Nom composant	TR [min]	Aire [%]
58		27.09	0.10
59		27.22	0.04
60	germacrene B	28.05	0.65
61		28.41	0.12
62		28.75	0.03
63		29.18	0.09
64		31.02	0.10
65		32.52	0.05
66	caryophyllene oxide	32.76	0.23
67		33.83	0.06
68		34.50	0.15
69		35.69	0.11
70		36.71	0.05
71		37.51	0.12
72		39.01	0.09
73		39.11	0.04
74		39.48	0.09
75		39.86	0.04
76		40.11	0.05
77		40.47	0.11
78		40.71	0.17
79		41.79	0.03
80		42.39	0.08
81		43.23	0.03
82		43.68	0.06
83		44.08	0.03
84		44.66	0.05
			100.00

Chromatogram

Sample Name : Genevrier beies 351BK601 Sample #: 351BK601 Page 1 of 1
FileName : C:\Data\Colonne Polaire\Huiles Essentielles\Genévrier\Genévrier Baies\2016\genévrier baies bio 161216.raw
Date : 12/19/2016 4:16:43 PM
Method : genévrier baies.mth Time of Injection: 12/16/2016 12:33:38 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