

# Certificate of Analysis

Analysed essential oil : Ciste

Analysis date : 27 August 2015

Batch : 238LA504

Shelf life : September 2018

## ❖ General description

Essential oil	Ciste	Origin	Spain
Latin name	<i>Cistus ladaniferus</i>		

## ❖ Organoleptic characteristics

Appearance	More or less viscous liquid
Colour	Yellow
Odour	Characteristic

## ❖ Physico-chemical characteristics

	Results (at 20°C)	Technical specifications			
Specific gravity	0.900	0.890	<	d	< 0.950
Refractive index	1.4748	1.4600	<	IR	< 1.4900
Optical rotation	-7.60°	-40°	<	$[\alpha]^{20}_D$	< -5°

## ❖ 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 : 2015-08-27

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

Date : 27/08/2015 10:07:47  
 Data Acquisition Time : 26/08/2015 22:29:56  
 Channel : A  
 Operator : Davenne  
 Dilution Factor : 1.000000

Result File :  
 Sequence File : C:\Sequences\CPG\2015\150826.seq

## Rapport d'analyse

colonne apolaire

Pic #	Component Name	TR [min]	Area [%]
1		4.58	0.30
2		6.59	0.03
3		6.99	0.10
4		7.27	0.47
5		7.88	0.11
6		8.96	0.09
7		9.11	0.16
8	tricyclene	9.49	0.91
9	thujene <alpha>	9.66	0.16
10	pinene <alpha>	9.95	37.72
11	camphene	10.41	4.98
12	thuja-2,4(10)-diene	10.56	1.06
13	pinene <beta>	11.47	0.55
14	myrcene	12.05	0.33
15	phellandrene <alpha>	12.60	0.55
16		12.76	0.04
17	carene <delta-3>	13.06	0.15
18	terpinene <alpha>	13.18	0.79
19	cyclohexanone <2,2,6-trimethyl	13.34	5.71
20	phellandrene <beta>	13.63	0.79
21	limonene	13.72	1.13
22	ocimene <(Z)-beta>	14.09	0.24
23		14.31	0.16
24	ocimene <(E)-beta>	14.43	0.30
25		14.67	0.05
26	terpinene <gamma>	14.98	1.27
27	camphenilone	15.31	0.65
28		15.69	0.09
29		15.87	0.40
30	cymenene <p>	16.06	1.44
31	terpinolene	16.31	0.52
32		16.45	0.23
33	linalool	16.61	0.57
34		16.74	0.28
35		17.14	0.40
36	campholenal <alpha>	17.40	0.86
37		17.89	0.12
38	camphor	18.05	0.66
39	pinocarveol <trans>	18.22	3.92
40		18.45	0.20
41	camphene hydrate	18.58	0.35
42	pinocamphone <trans>	18.89	1.08
43		19.15	0.15
44	borneol + pinocamphone <cis>	19.41	2.79
45	terpinen-4-ol	19.99	1.45
46	cymen-8-ol <p>	20.33	0.84
47	terpineol <alpha>	20.50	0.38
48		20.69	0.11
49	myrtenol	20.81	0.94
50		21.12	0.09
51		21.59	0.05
52		21.71	0.24
53		22.16	0.58
54		22.46	0.36
55		22.69	0.17
56		22.94	0.26
57		23.48	0.08
58		23.74	0.11

27/08/2015 10:07:47 Result:

Pic #	Component Name	TR [min]	Area [%]
59		23.89	0.34
60	bornyl acetate	24.82	4.11
61		25.33	0.36
62		25.83	0.22
63	myrtenyl acetate	26.43	0.38
64		26.81	0.08
65		26.91	0.12
66	cubebene <alpha>	28.19	0.14
67		28.57	0.17
68		28.82	0.27
69	sativene	28.93	0.41
70	copaene <alpha>	29.25	0.47
71		29.37	0.26
72		29.53	0.05
73		29.79	0.07
74		30.63	0.12
75	caryophyllene <(E)>	30.90	0.30
76		31.80	0.54
77		32.06	0.06
78		32.24	0.10
79	aromadendrene <allo>	32.52	1.11
80		32.99	0.18
81		33.12	0.15
82		33.47	0.16
83		33.66	0.60
84	viridiflorene	33.92	3.30
85		34.07	0.23
86		34.26	0.27
87		34.51	0.12
88		34.67	0.23
89		34.90	0.80
90		35.23	0.08
91		35.36	0.29
92		36.49	0.22
93		36.63	0.22
94		37.06	0.10
95	viridiflorol	37.29	2.70
96	ledol	37.72	1.31
97		38.61	0.12
98		39.00	0.07
99		39.19	0.13
100		40.05	0.10
101		40.31	0.12
102		46.57	0.05
103		50.00	0.09
104		53.62	0.09
105		58.68	0.04
			100.00

Chromatogram

Sample Name : Ciste      Sample #: 238LA504      Page 1 of 1  
FileName : C:\Data\Colonne Apolaire\Huiles Essentielles\Ciste\2015\ciste 150826.raw  
Date : 27/08/2015 10:07:51      Time of Injection: 26/08/2015 22:29:56  
Method : ciste.mth      Start Time : 0.00 min      End Time : 82.00 min      Low Point : -47.27 mV      High Point : 993.88 mV  
Plot Offset: -47.27 mV      Plot Scale: 1041.1 mV

