

GC/MS BATCH NUMBER: C20102

ESSENTIAL OIL: CAJEPUT ORGANIC
BOTANICAL NAME: MELALEUCA CAJEPUTI
ORIGIN: VIETNAM

KEY CONSTITUENTS PRESENT IN THIS BATCH OF CAJEPUT ORGANIC OIL	%
1,8-CINEOLE	56.2
α -TERPINEOL	11.9
LIMONENE	5.2
LINALOOL	3.2
TERPINEN-4-OL + β -CARYOPHYLLENE	2.6
α -PINENE + α -THUJENE	1.9
γ -TERPINENE	1.6
β -MYRCENE	1.6
TERPINOLENE	1.3
β -PINENE	1.2
p-CYMENE	1.1
α -HUMULENE	1.1
MUUROLENE + β -SELINENE	1.1

Comments from Robert Tisserand: This is a pure, quality Cajuput oil with constituents within expected ranges.

CUSTOMER :

**PLANT THERAPY
126 Locust Street South
Twin Falls, ID 83 301
USA**

Sample nature : ESSENTIAL OIL
Botanical species : MELALEUCA CAJEPUTI
Reference name : CAJEPUT ORGANIC
Batch number : VIETNAM
Origin : C2010252
Part: LEAF
Pyre^essences reference : F062
Date of reception : 10/02/2015
Date analysis : 10/14/2015
Packaging : Amber flask of 5 ml – ambient temperature
Analysis : Classic

Validated report by :

Daniel DANTIN



GAS CHROMATOGRAPHY norm NF ISO 11024

Analysis conditions :

CPG 6890 / MS 5973 – Column : VF WAX polar 60 m × 0,25 mm × 0,5 µm

CPG 6890 FID - Column : VF WAX polar 60 m × 0,25 mm × 0,5 µm

Temperature program : 6 mn to 60 °C -2 °C/mn→250 °C - 20mn to 250 °C

Carrier gas He : 23 psis/MS – 30 psis/FID

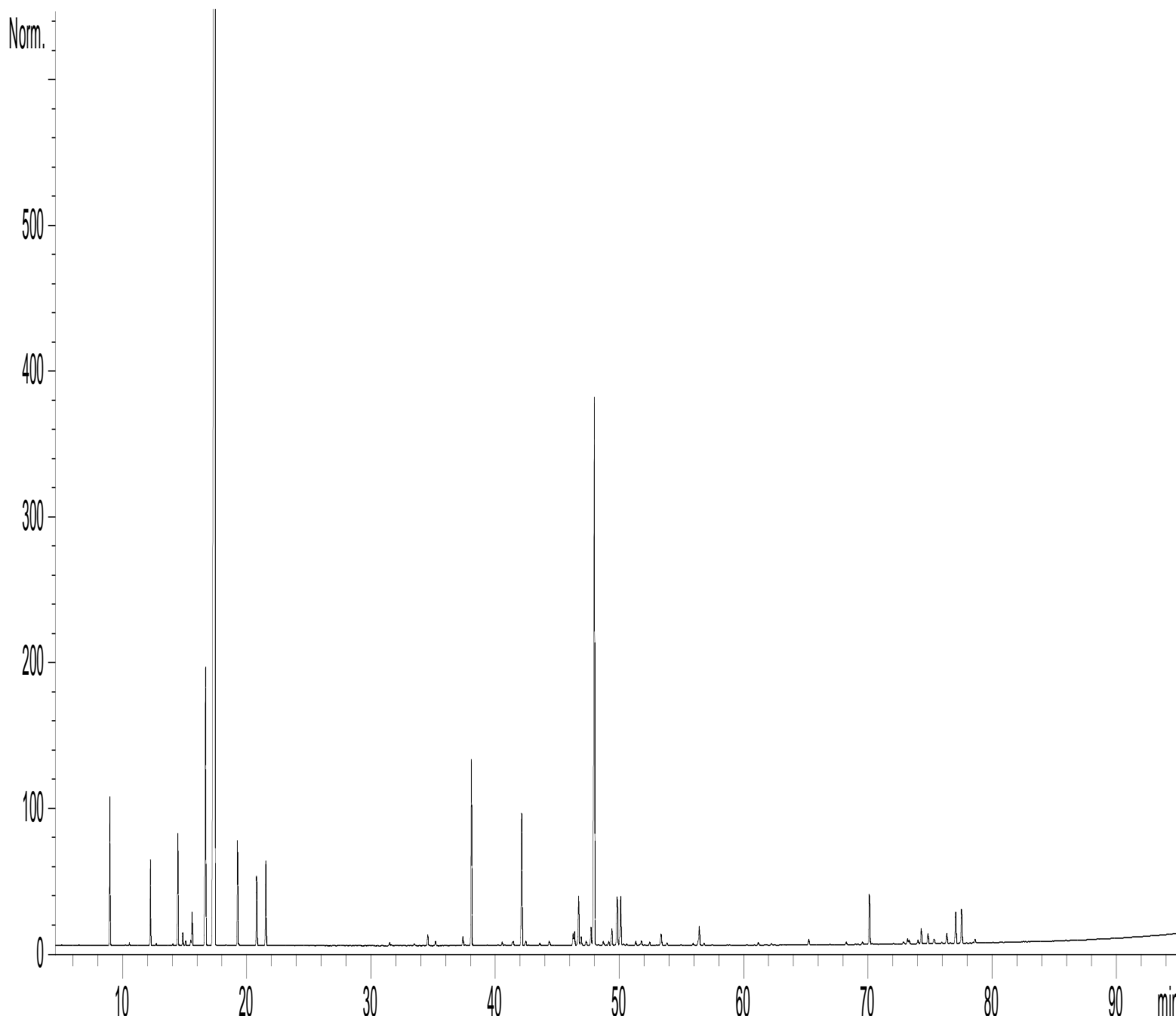
Sample injection / split : 1 µl of 10 % solution in hexane,

Mass range : 30 to 350, Oil components are identified by a combination of retention times (our own database) and mass spectra library NKS 75 000 records,

Percentages are calculated from GC/FID peaks areas without using corrections factors,

Chromatographic profile (GC/FID)

FID2 B, (Z:\PLANTHER\MC52F062.D)



Identification results 1 : CAJEPUT ORGANIC VIETNAM BATCH N° C2010252

Peak	RT (min)	Compound name	%	Norm	Allergens
1	5,1	ACETONE	0,01		
2	6,5	ETHANOL	0,01		
3	9,0	α -PINENE + α -THUYENE	1,85		
4	9,6	TOLUENE	0,01		
5	10,2	α -FENCHENE	0,01		
6	10,5	CAMPHENE	0,04		
7	12,2	β -PINENE	1,17		
8	12,7	SABINENE	0,03		
9	14,0	Δ 3-CARENE	0,02		
10	14,0	β -MYRCENE	1,58		
11	14,8	α -PHELLANDRENE	0,18		
12	15,1	ψ -LIMONENE	0,07		
13	15,5	1,4-CINEOL	0,08		
14	15,6	α -TERPINENE	0,51		
15	16,7	LIMONENE	5,19		5,19
16	17,4	1,8-CINEOLE	56,23		
17	18,3	Cis- β -OCIMENE	0,01		
18	19,0	Trans-ARBUSCULONE	0,01		
19	19,3	γ -TERPINENE	1,61		
20	19,4	Trans- β -OCIMENE	0,02		
21	20,8	p-CYMENE	1,09		
22	21,5	TERPINOLENE	1,33		
23	24,1	PINOL	0,01		
24	27,5	ROSE cis-OXIDE	0,01		
25	31,5	α ,p-DIMETHYLSTYRENE	0,05		
26	31,6	LINALOOL Cis-OXIDE	0,02		
27	33,5	LINALOOL trans-OXIDE + δ -ELEMENE	0,03		
28	34,6	YLANGENE	0,22		
29	35,2	α -COPAENE	0,08		
30	37,4	BENZALDEHYDE	0,18		
31	37,6	SATIVENE ISOMER	0,02		
32	38,1	LINALOL	3,22		3,22
33	39,4	METHYL CITRONELLATE	0,01		
34	39,5	ARISTOLENE	0,01		
35	39,8	NEOISOPULEGOL	0,01		
36	40,2	ISOPULEGOL	0,02		
37	40,6	ϵ -CADINENE	0,07		
38	40,8	FENCHOL	0,02		
39	41,5	β -ELEMENE	0,06		
40	41,5	α -GUAIENE	0,06		
41	41,8	β -CUBEBENE	0,01		
42	42,1	TERPINENE-4-OL + β -CARYOPHYLLENE	2,59		
43	42,5	β -GUAIENE + HOTRIENOL	0,10		
44	42,7	SESQUITERPENE	0,01		
45	43,6	GURJUNENE ISOMER	0,05		

Identification results 2 : CAJEPUT ORGANIC VIETNAM BATCH N° C2010252

Peak	RT (min)	Compound name	%	Norm	Allergens
46	44,3	CADINADIENE ISOMER	0,11		
47	44,6	GERMACRENE A	0,01		
48	45,5	CITRONELLYL ACETATE	0,01		
49	45,9	SESQUITERPENE	0,01		
50	46,3	ZONARENE	0,23		
51	46,4	δ-TERPINEOL	0,26		
52	46,7	α-HUMULENE	1,06		
53	46,9	γ-SELINENE	0,19		
54	47,3	NERAL	0,04		0,04
55	47,3	4,5-di-épi-ARISTOLOCHENE	0,03		
56	47,7	γ-MUUROLENE	0,36		
57	48,0	α-TERPINEOL	11,88		
58	48,3	CALARENE	0,02		
59	48,7	GURJUNENE ISOMER	0,09		
60	48,9	SESQUITERPENE	0,01		
61	49,1	EREMOPHILENE	0,08		
62	49,4	GERMACRENE D	0,32		
63	49,8	α-MUUROLENE + β-SELINENE	1,05		
64	50,1	α-SELINENE	1,01		
65	50,3	7-épi-α-SELINENE	0,04		
66	50,6	SESQUITERPENE	0,03		
67	51,3	GERANYL ACETATE	0,08		
68	51,7	CITRONELLOL	0,02		0,02
69	51,8	δ-CADINENE	0,08		
70	52,0	γ-CADINENE	0,02		
71	52,4	δ-SELINENE	0,07		
72	53,3	SELINA-3,7-DIENE + SESQUITERPENE	0,28		
73	53,8	NEROL	0,04		
74	54,9	COMPONENT Mw=220	0,01		
75	55,9	CYPERENE ISOMER	0,04		
76	56,4	CALAMENENE + GERMACRENE B	0,09		
77	56,4	GERANIOL	0,35		0,35
78	56,8	p-CYMENE-8-OL	0,04		
79	57,5	EXO-2-HYDROXYCINEOLE	0,02		
80	58,7	CALACORENE ISOMER	0,01		
81	61,2	α-CALACORENE	0,05		
82	62,2	SESQUITERPENOL	0,03		
83	65,2	CARYOPHYLLENE OXIDE	0,11		
84	68,2	EPOXY-6,7-HUMULENE	0,06		
85	69,5	ELEMOL + SESQUITERPENOL	0,06		
86	70,1	GUAIOL	0,97		
87	70,3	VIRIDIFLOROL	0,02		
88	70,6	SESQUITERPENOL	0,01		
89	72,1	ROSIFOLIOL	0,01		
90	72,9	EUDESMA-5-EN-11-α-OL	0,04		

Identification results 3 : CAJEPUT ORGANIC VIETNAM BATCH N° C2010252

Peak	RT (min)	Compound name	%	Norm	Allergens
91	72,9	SESQUITERPENOL	0,01		
92	73,2	SELINADIENOL ISOMER	0,10		
93	73,3	MAALIOL ISOMER	0,08		
94	74,0	EUGENOL	0,09		0,09
95	74,3	γ -EUDESMOL	0,31		
96	74,8	GUAIOL ISOMER	0,20		
97	75,3	α -MUUROLOL + HINESOL	0,13		
98	76,0	SESQUITERPENOL	0,03		
99	76,4	BULNESOL	0,21		
100	77,1	α -EUDESMOL	0,64		
101	77,5	β -EUDESMOL	0,69		
102	78,6	EUDESMA-7-EN-4-OL	0,08		
103	109,0	PALMITIC ACID	0,07		
		TOTAL	99,91		8,91