



PLANT THERAPY

100% PURE ESSENTIAL OILS

GC/MS BATCH NUMBER: CC0100

ESSENTIAL OIL: CINNAMON BARK
BOTANICAL NAME: CINNAMOMUM VERUM
ORIGIN: MADAGASCAR

KEY CONSTITUENTS PRESENT IN THIS BATCH OF CINNAMON BARK OIL	%
(E)-CINNAMALDEHYDE	71.8
EUGENOL	5.1
α -PINENE	4.6
LINALOOL	3.5
CINNAMYL ACETATE	3.4
β -CARYOPHYLLENE + TERPINEN-4-OL	2.0
α -COPAENE	1.8
LIMONENE	1.4
β -PHELLANDRENE + 1,8-CINEOLE	1.3

Comments from Robert Tisserand: A very good quality cinnamon bark oil with typical constituent profile.

CUSTOMER :

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

Sample nature: ESSENTIAL OIL
Botanical species: CINNAMOMUM VERUM
Reference name: CINNAMON
Batch number: CC0100
Origin: MADAGASCAR
Part: BARK
Pyrenessences reference: F069
Date of reception: 10/02/2015
Date analysis: 10/14/2015
Packaging: Brown 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

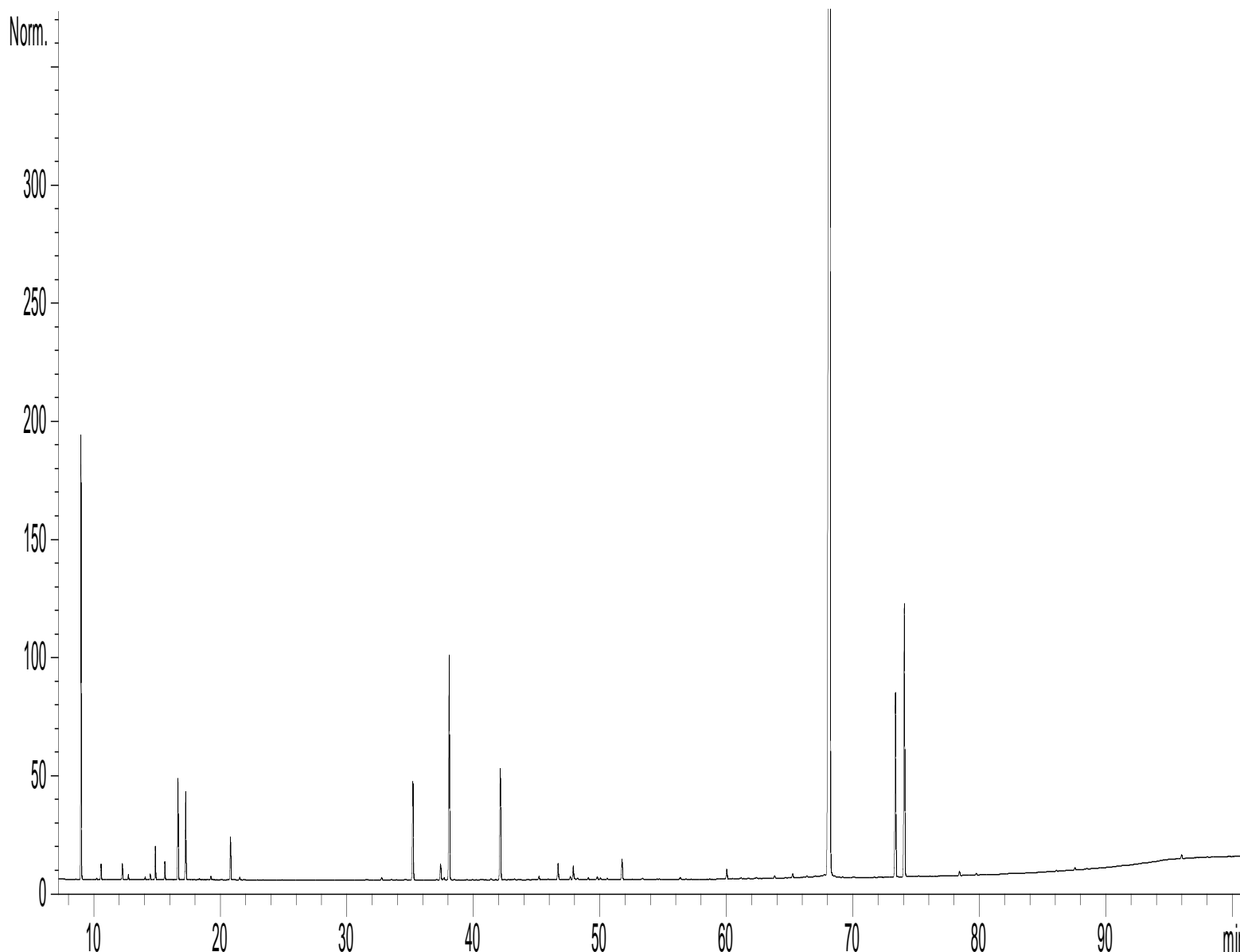
Sample injection / split : 1 µl of 10 % solution in Ethyl alcohol,

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\CZ00F069.D)



Identification results 1 : CINNAMON BARK MADAGASCAR BATCH N°CC0100

Peak	RT (min)	Compound name	%	Norm (%)	Allergens (%)
1	9,0	α-PINENE	4,64		
2	10,2	α-FENCHENE	0,02		
3	10,6	CAMPHENE	0,22		
4	12,2	β-PINENE	0,22		
5	12,7	SABINENE	0,07		
6	14,0	Δ ³ -CARENE	0,03		
7	14,4	β-MYRCENE	0,08		
8	14,8	α-PHELLANDRENE	0,45		
9	15,6	α-TERPINENE	0,24		
10	16,6	LIMONENE	1,39		1,39
11	17,2	β-PHELLANDRENE + 1,8-CINEOL	1,27		
12	18,3	Cis-β-OCIMENE	0,02		
13	19,3	γ-TERPINENE	0,05		
14	19,4	Trans-β-OCIMENE	0,01		
15	20,8	p-CYMENE	0,63		
16	21,5	TERPINOLENE	0,04		
17	32,8	α-CUBEBENE	0,04		
18	33,5	LINALOOL Cis-OXIDE	0,01		
19	34,7	YLANGENE	0,01		
20	35,2	α-COPAENE	1,76		
21	37,4	BENZALDEHYDE	0,30		
22	37,7	α-GURJUNENE	0,04		
23	38,1	LINALOOL	3,50		3,50
24	38,1	β ¹ -CUBEBENE	0,14		
25	38,5	SESQUITERPENE	0,01		
26	41,4	β-ELEMENE	0,02		
27	42,1	β-CARYOPHYLLENE + TERPINENE-4-OL	2,01		
28	43,3	Cis-p-MENTH-2-EN-1-OL	0,02		
29	43,6	SESQUITERPENE	0,01		
30	45,2	ALLO-AROMADENDRENE + Trans-PINOCARVEOL	0,06		
31	45,9	SESQUITERPENE	0,01		
32	46,7	α-HUMULENE	0,30		
33	47,7	γ-MUUROLENE	0,06		
34	47,9	α-TERPINEOL	0,24		
35	48,0	TERPENYL ACETATE	0,03		
36	48,3	BORNEOL + LEDENE	0,04		
37	49,1	GERMACRENE D	0,03		
38	49,5	CADINENE ISOMER	0,01		
39	54,6	β-BULNESENE	0,02		
40	49,8	β-SELINENE + α-MUUROLENE	0,06		
41	50,0	α-SELINENE	0,04		
42	50,6	BICYCLOGERMACRENE	0,02		
43	51,8	δ-CADINENE	0,38		
44	53,4	α-CURCUMENE	0,03		
45	54,7	BENZENE PROPANAL	0,01		

Identification results 2 : CINNAMON BARK MADAGASCAR BATCH N°CC0100

Peak	RT (min)	Compound name	%	Norm (%)	Allergens (%)
46	56,4	CALAMENENE	0,03		
47	60,0	Z-CINNAMALDEHYDE	0,19		0,19
48	61,2	α -CALACORENE	0,02		
49	62,4	BENZENEPROPANOL ACETATE	0,02		
50	63,8	BENZALDEHYDE, 2-METHOXY	0,04		
51	70,0	ISOCARYOPHYLLENE EPOXIDE	0,03		
52	65,2	CARYOPHYLLENE EPOXIDE	0,08		
53	66,4	E-METHYLEUGENOL	0,03		
54	67,1	BENZENE PROPANOL	0,01		
55	68,2	E-CINNAMALDEHYDE	71,79		71,79
56	69,2	Epoxy-6,7-HUMULENE	0,02		
57	72,1	SPATHULENOL	0,01		
58	73,4	CINNAMYL ACETATE	3,44		
59	74,1	EUGENOL	5,13		5,13
60	75,2	SESQUITERPENOL	0,02		
61	78,4	EUGENYL ACETATE	0,08		
62	79,7	CINNAMIC ALCOHOL	0,03		0,03
63	86,1	AROMATIC COMPONENT	0,02		
64	87,5	Trans-o-METHOXY-CINNAMALDEHYDE	0,05		
65	96,0	BENZYL BENZOATE	0,08		0,08
66	107,1	CINNAMIC ACID	0,27		
		TOTAL	99,98		82,11