



PLANT THERAPY

100% PURE ESSENTIAL OILS

GC/MS BATCH NUMBER: B10101

ESSENTIAL OIL: BASIL LINALOOL
BOTANICAL NAME: OCIMUM BASILICUM
ORIGIN: HUNGARY

KEY CONSTITUENTS PRESENT IN THIS BATCH OF BASIL LINALOOL OIL	%
LINALOOL	61.6
1,8-CINEOLE	6.9
EUGENOL	6.2
ESTRAGOLE	4.1
α -HUMULENE	1.8
β -PINENE	1.5
TRANS-BERGAMOTENE	1.4
METHYLEUGENOL	1.3
Trans- β -OCIMENE	1.2
β -MYRCENE	1.2
α -PINENE	1.1
TERPINEN-4-OL	0.6
CAMPHOR	0.6

Comments from Robert Tisserand: Smells very good, and conforms to the ISO standard. Within that standard, I look for high linalool and low estragole (for safety) and this oil matches very well.

CUSTOMER :

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

Sample nature: ESSENTIAL OIL
Botanical species: OCIMUM BASILICUM
Reference name: BASIL LINALOOL
Batch number: B10101
Origin: HUNGARY
Part: LEAF
Pyre^essences reference: D132
Date of reception: 03/12/2015
Date analysis: 03/17/2015
Packaging: Amber flask of 4 ml – ambient temperature
Analysis: Classic

Validated report by :

Daniel DANTIN



GAS CHROMATOGRAPHY norm NF ISO 11024

Analysis conditions :

CPG 7890 / MS 5975 – Column : VF WAX polar 60 m × 0,25 mm × 0,5 µm

CPG 5890 FID - Column : HP INNOWAX 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

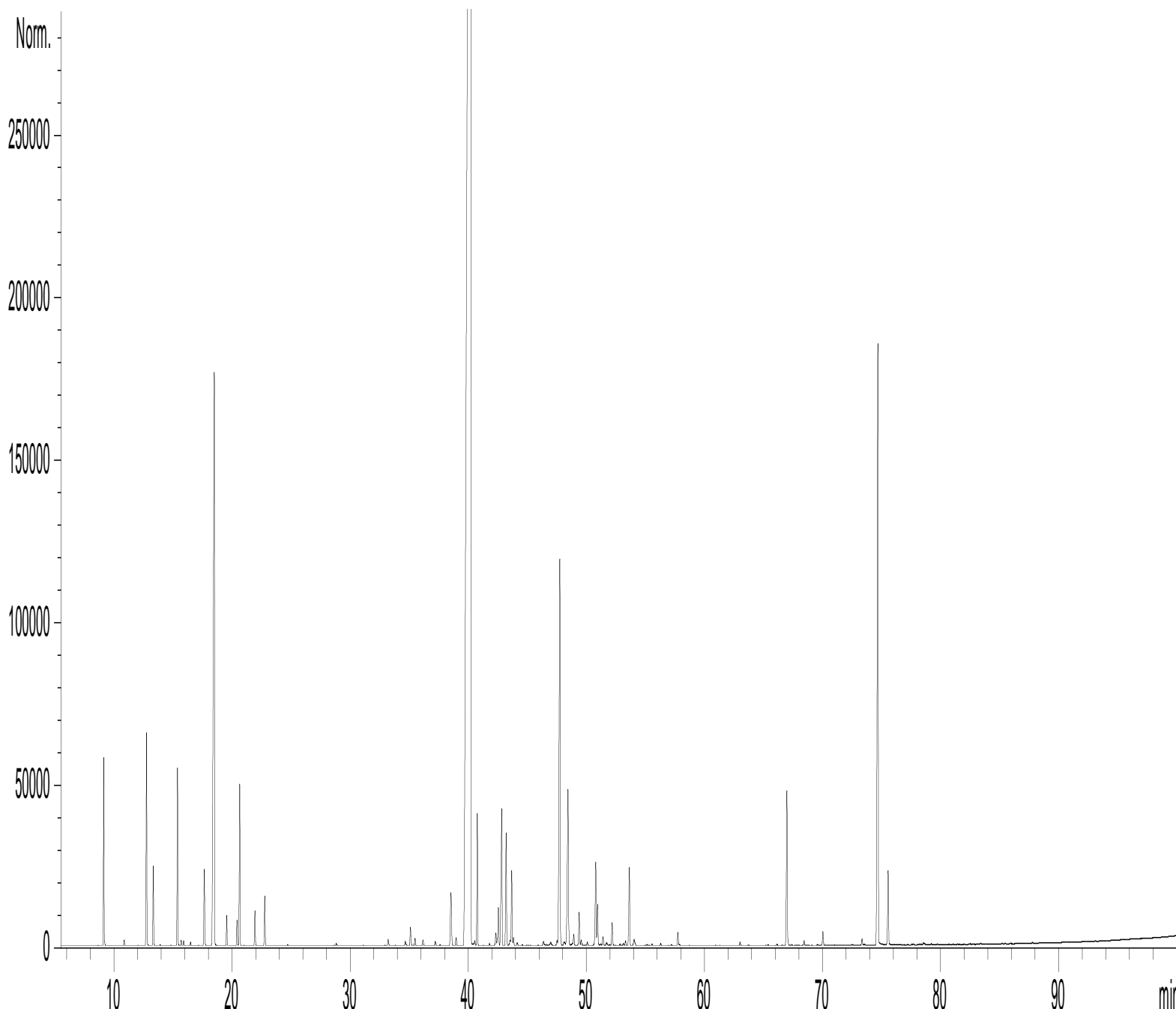
Sample injection / split : 1 µl of 10 % solution in hexane,

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)

FID1 A, (Y:\PLANTHER\OB15D132.D)



Identification results 1 : BASIL LINALOOL HUNGARY BATCH B10101

Peak	RT (min)	Compound name	%	Norm	Allergens
1	8,6	TRICYCLENE	0,01		
2	9,1	α -PINENE	1,06		
3	9,2	α -THUYENE	0,02		
4	10,9	CAMPHENE	0,04		
5	12,0	1,6-OCTADIENE 2,7-DIMETHYL ISOMER	0,01		
6	12,7	β -PINENE	1,49		
7	13,3	SABINENE	0,53		
8	13,9	Δ 2-CARENE	0,01		
9	14,8	Δ 3-CARENE	0,01		
10	15,4	β -MYRCENE	1,21		
11	15,7	α -PHELLANDRENE	0,04		
12	15,9	ψ -LIMONENE	0,04		
13	16,5	α -TERPINENE	0,03		
14	17,2	1,8-CINEOLE, 2,3-DEHYDRO	0,01		
15	17,6	LIMONENE	0,64		0,64
16	18,5	1,8-CINEOLE	6,89	2 – 8	
17	19,5	Cis- β -OCIMENE	0,21		
18	20,4	γ -TERPINENE	0,20		
19	20,6	Trans-β-OCIMENE	1,21	0,2 – 2	
20	21,0	3-OCTANONE	0,01		
21	21,9	p-CYMENE	0,27		
22	22,8	TERPINOLENE	0,39		
23	24,7	cis-3-HEXENYL ACETATE	0,01		
24	28,6	3-HEXEN-1-OL	0,01		
25	28,8	OCT-1-EN-3-YL ACETATE	0,03		
26	31,1	PINENOL ISOMER	0,01		
27	32,9	α ,p-DIMETHYLSTYRENE	0,01		
28	33,2	LINALOOL cis-OXIDE	0,07		
29	34,7	Trans-THUYANOL + α -CUBEBENE	0,05		
30	35,1	LINALOOL Trans-OXIDE	0,18		
31	35,5	OCTYL ACETATE	0,08		
32	36,2	PINENOL ISOMER	0,06		
33	37,2	α -COPAENE	0,05		
34	37,6	ALIPHATIC ESTER	0,02		
35	38,5	CAMPHOR	0,61	0,2 – 1,5	
36	39,0	β -BOURBONENE	0,08		
37	40,2	LINALOOL	61,64	45 – 62	61,64
38	40,6	1-OCTANOL	0,07		
39	40,8	LINALYL ACETATE	0,93		
40	41,8	α ,cis-BERGAMOTENE	0,02		
41	42,3	ELEMENE ISOMER	0,12		
42	42,6	BORNYL ACETATE	0,35		
43	42,8	α -trans-BERGAMOTENE	1,41		
44	43,2	β -ELEMENE	0,97		
45	43,5	α -GUAIENE	0,06		

Identification results 2 : BASIL LINALOOL HUNGARY BATCH B10101

Peak	RT (min)	Compound name	%	Norm	Allergens
46	43,7	TERPINENE-4-OL	0,63	Tr - 4	
47	43,8	α -CARYOPHYLLENE	0,07		
48	44,2	β -COPAENE	0,04		
49	46,4	CADINA-3,5-DIENE	0,07		
50	47,0	ALLO-AROMADENDRENE	0,09		
51	47,4	E- β -FARNESENE	0,05		
52	47,7	ESTRAGOLE	4,11	Tr - 30	
53	48,1	SESQUITERPENE	0,06		
54	48,4	α -HUMULENE	1,75		
55	48,9	Z- β -FARNESENE	0,15		
56	49,9	α -TERPINEOL	0,30		
57	49,6	BORNEOL	0,07		
58	50,1	ACIPHYLLENE	0,05		
59	50,8	GERMACRENE D	0,83		
60	50,9	α -BULNESENE	0,36		
61	51,2	GURJUNENE ISOMER	0,03		
62	51,4	β -SELINENE + β -BISABOLENE	0,09		
63	51,7	GERANIAL + α -SELINENE	0,05		0,05
64	52,0	EPOXY TERPENYL ACETATE ISOMER	0,01		
65	52,2	BICYCLOGERMACRENE + CARVONE	0,23		
66	52,8	GERANYL ACETATE	0,03		
67	53,1	CITRONELLOL	0,03		0,03
68	53,3	δ -CADINENE	0,05		
69	53,6	γ -CADINENE	0,73		
70	54,0	β -SESQUIPELLANDRENE	0,10		
71	55,1	NEROL	0,03		
72	55,6	α -AMORPHENE	0,02		
73	56,3	E,E-2,6-DIMETHYL-3,5,7-OCTATRIENE-2-OL	0,02		
74	57,7	CALAMENENE	0,12		
75	57,8	GERANIOL	0,02		0,02
76	63,0	3-7-OCTADIENE-2,6-DIOL, 2,6-DIMETHYL	0,03		
77	66,2	CARYOPHYLLENE EPOXIDE	0,01		
78	66,9	SESQUITERPENOL	0,06		
79	67,0	METHYLEUGENOL	1,32		
80	68,4	NEROLIDOL	0,04		
81	69,6	EPOXY-6,7-HUMULENE	0,01		
82	70,0	Epi-CUBENOL	0,13		
83	73,3	SPATHULENOL	0,07		
84	74,7	EUGENOL	6,22	2 - 15	6,22
85	75,6	T-CADINOL	0,70		
86	78,5	α -CADINOL	0,04		
		TOTAL	99,99		68,60