



PLANT THERAPY

100% PURE ESSENTIAL OILS

GC/MS BATCH NUMBER: CK0102

ESSENTIAL OIL: CORIANDER

BOTANICAL NAME: CORIANDRUM SATIVUM

ORIGIN: RUSSIA

KEY CONSTITUENTS PRESENT IN THIS BATCH OF CORIANDER OIL	%
LINALOOL	68.8
α -PINENE	6.7
CAMPHOR	5.1
γ -TERPINENE	4.8
LIMONENE	3.1
GERANYL ACETATE	2.9
GERANIOL	1.3
β -MYRCENE	1.3
CAMPHENE	1.3
α -TERPINEOL	0.3

Comments from Robert Tisserand: Has the odor profile of a good quality coriander seed oil. One constituent, alpha-terpineol, is slightly low compared to the ISO standard (0.3% instead of 0.5%) but this does not concern me.

CUSTOMER :

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

Sample nature: ESSENTIAL OIL
Botanical species: CORIANDRUM SATIVUM
Reference name: CORIANDER
Batch number: CK0102
Origin: RUSSIA
Part: SEED
Pyre^essences reference: D228
Date of reception: 03/19/2015
Date analysis: 04/10/2015
Packaging: Amber flask of 4 ml – ambient temperature
Analysis: Classic analysis

Validated report by :

Daniel DANTIN

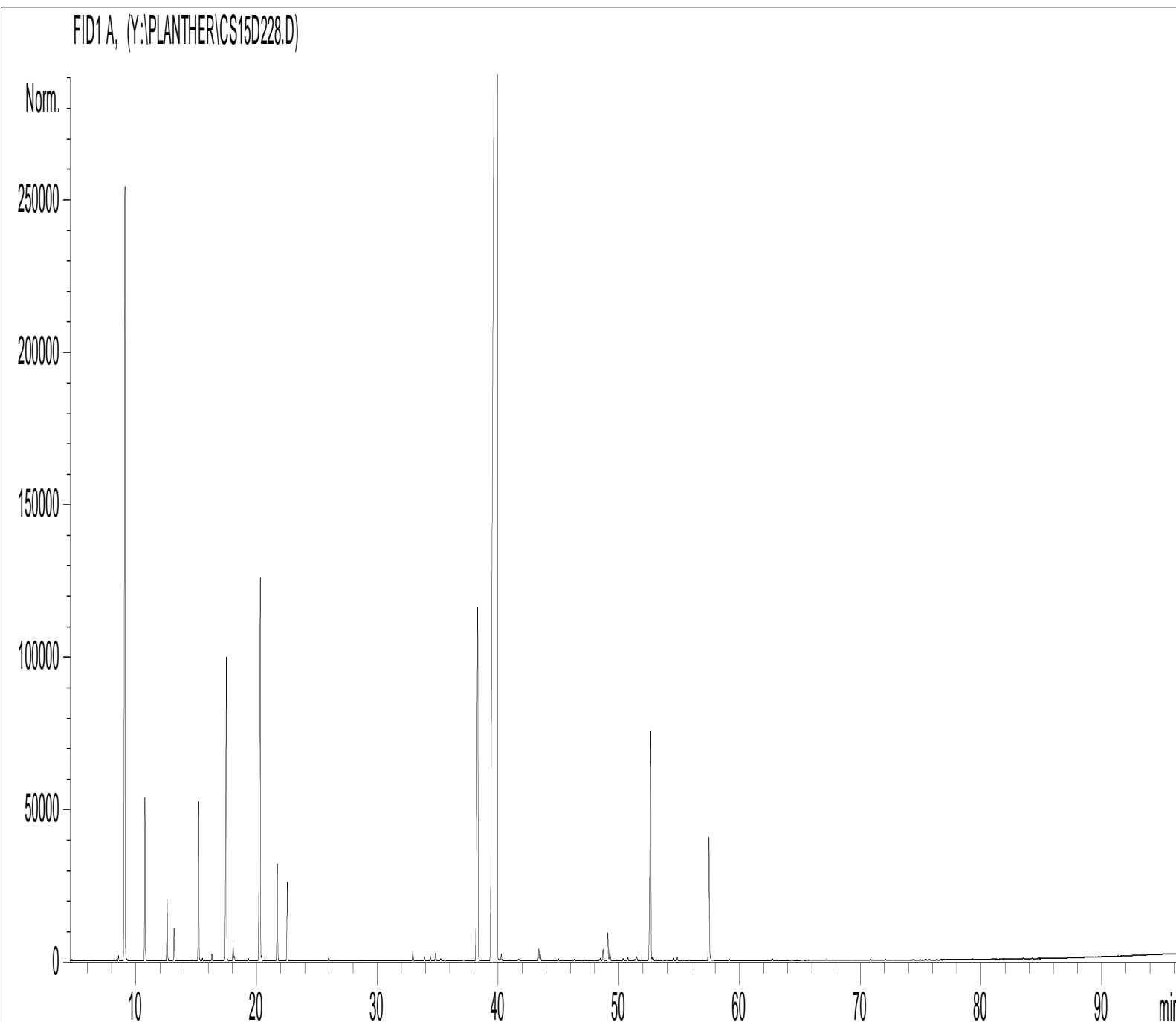


GAS CHROMATOGRAPHY norm NF ISO 11024

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)



Identification results 1 : CORIANDER SEED BATCH CK0102

Peak	RT (min)	Compound name	%	Norm (%)	Allergens (%)
1	5,8	ACETONE	0,01		
2	8,4	METHYL 2-METHYLBUTYRATE	0,01		
3	8,6	TRICYCLENE	0,04		
4	8,7	METHYL ISOVALERATE	0,01		
5	9,1	α-PINENE	6,66	3 - 7	
6	9,3	α-THUYENE	0,02		
7	10,8	CAMPHENE	1,28		
8	11,3	HEXANAL	0,01		
9	12,6	β-PINENE	0,52		
10	13,2	SABINENE	0,27		
11	13,3	PINADIENE	0,01		
12	14,6	Δ3-CARENE	0,01		
13	15,2	β-MYRCENE	1,30	0,5 - 1,5	
14	15,5	α-PHELLANDRENE	0,03		
15	15,7	ψ-LIMONENE	0,01		
16	16,3	α-TERPINENE	0,06		
17	16,4	HEPTANAL	0,01		
18	17,5	LIMONENE	3,10	2 - 5	3,10
19	18,1	β-PHELLANDRENE	0,15		
20	18,2	1,8-CINEOLE	0,04		
21	19,1	FURAN, 2-PENTYL-	0,01		
22	19,3	Cis-β-OCIMENE	0,02		
23	20,3	γ-TERPINENE	4,77	2 - 7	
24	20,4	Trans-β-OCIMENE	0,05		
25	21,7	p-CYMENE	0,87		
26	22,1	TERPINOLENE ISOMER	0,01		
27	22,6	TERPINOLENE	0,74		
28	23,0	OCTANAL	0,01		
29	26,0	6-METHYL-5-HEPTEN-2-ONE	0,04		
30	30,0	NONANAL	0,01		
31	32,7	α-p-DIMETHYLSTYRENE	0,01		
32	32,9	LINALOOL Cis-OXIDE	0,10		
33	33,4	1-HEPTANOL	0,01		
34	33,9	Cis-METHYL-5-HEPTEN-2-OL	0,04		
35	34,4	Trans-THUYANOL	0,05		
36	34,8	LINALOOL Trans-OXIDE	0,08		
37	35,3	OCTYL ACETATE	0,03		
38	35,6	CITRONELLAL	0,03		
39	37,1	DECANAL	0,03		
40	38,3	CAMPHOR	5,07	4 - 6	
41	39,9	LINALOOL	68,81	65 - 78	68,81
42	40,3	Cis-THUYANOL	0,07		
43	40,4	1-OCTANOL	0,01		
44	40,9	METHYL CITRONELLATE	0,01		
45	41,0	Trans-p-MENTH-2-EN-1-OL	0,01		

Identification results 2 : CORIANDER SEED BATCH CK0102

Peak	RT (min)	Compound name	%	Norm (%)	Allergens (%)
46	41,7	PINOCARVONE	0,03		
47	43,4	TERPINENE-4-OL	0,12		
48	43,5	β-CARYOPHYLLENE	0,06		
49	43,8	METHYL BENZOATE	0,01		
50	44,8	Cis-p-MENTH-2-EN-1-OL	0,01		
51	45,0	Cis-β-TERPINEOL	0,02		
52	45,4	MYRTENAL	0,01		
53	46,3	2-DECENAL	0,02		
54	46,6	1-NONANOL + Trans-PINOCARVEOL	0,01		
55	47,2	CITRONELLYL ACETATE + E-β-FARNESENE	0,01		
56	47,5	BORNEOL	0,01		
57	47,9	Trans-VERBENOL	0,01		
58	48,0	α-HUMULENE	0,01		
59	48,5	NERAL	0,04		0,04
60	48,5	MYRTENYL ACETATE	0,12		
61	49,1	α-TERPINEOL	0,28	0,5 - 1,5	
62	49,3	BORNYL METHYL ETHER	0,13		
63	50,4	VERBENONE	0,03		
64	50,8	NERYL ACETATE	0,03		
65	51,5	GERANIAL	0,05		0,05
66	51,9	CARVONE + LINALOOL PYRANIC trans-OXIDE	0,01		
67	52,6	GERANYL ACETATE	2,91	1 - 3,5	
68	52,8	CITRONELLOL	0,06		0,06
69	53,9	METHYL SALICYLATE	0,01		
70	54,0	NERYL PROPIONATE	0,01		
71	54,5	MYRTENOL	0,03		
72	54,8	NEROL	0,04		
73	55,8	2-DECEN-1-OL	0,01		
74	57,5	GERANIOL	1,32	0,5 - 3	1,32
75	57,6	p-CYMENE-8-OL	0,03		
76	59,2	2-DODECENAL	0,01		
77	62,7	2,6-DIMETHYL-3,7-OCTADIENE-2,6-DIOL	0,02		
78	64,3	1-DODECANOL	0,01		
79	64,4	2-TRIDECENAL	0,01		
80	66,3	Trans-2-TETRADECEN-1-OL	0,01		
81	67,2	Cis-NEROLIDOL	0,01		
82	75,4	PENTADECANONE TRIMETHYL	0,01		
83	79,3	α-BISABOLOL	0,01		
84	83,5	FARNESOL	0,01		0,01
85	91,3	NUCIFEROL	0,01		
		TOTAL	99,99		73,39