



316 Old Hickory Blvd East, Madison, TN 37115

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sold@naturesgift.com

Healing Body, Mind and Spirit with Pure Essential Oils

Since 1995

www.naturesgift.com

Inula *Inula graveolens*

Batch No. SP-59167

Spain

Monoterpenes 9.52%

camphene	4.03
limonene	3.99
β pinene	0.87
(E) β ocimene	0.61
γ terpinene	0.02
myrcene	0.01

Monoterpenols 20.3%

borneol	20.3
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Sesquiterpenes

β caryophyllene	7.23
(E) β farnesene	2.15
germacrene D	1.78
γ cadinene	1.16
cembrene	0.64
β selinene	0.63
δ cadinene	0.58
bicyclogermacrene	0.57

Ethers %

caryophyllene oxide	4.63
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Esters 4.41%

matricaria ester	2.85
geranyl propionate	1.56
isoprenyl benzoate	1.18
lachnophyllum methyl ester	1.10
prenyl salicylate	0.98
hexyl salicylate	0.88
(Z) 3-hexenyl benzoate	0.63
10-acetoxy-8,9-epoxythymol isoburyrate	0.63
neryl propionate	0.51

Sesquiterpenols

τ cadinol	4.75
caryophylla-2.6-dien-5-α-ol	1.29
eudesma-7(11)-en-4-ol	1.11

Other

arteannuic acid	8.12
Unknown	2.75

Production Method: Steam distillation, roots

Date of Analysis: 10/26/2020

Customer :

Nature's Gift Aromatherapy
316 Old Hickory Blvd East
Madison, TN 37115

Sample Nature : ESSENTIAL OIL
Botanical name : INULA GRAVEOLENS
Sample name : INULA GRAVEOLENS
Batch number : IG1
Origin : -
Plant part : FLOWED HEAD
Our reference : CY33

Receipt : 15/10/2020
Analysis date : 22/10/2020
Packaging : Transparent flask of 4 ml
Requested analysis : GCsimple
Sample storage : 1 year - room temperature

The above information is provided by the customer and sampling is under his responsibility

Comments and conclusions :

Report validated by :

Daniel Dantin - *Laboratory director*



Report written by :

Louise Lefoulon - *Analyst technician*

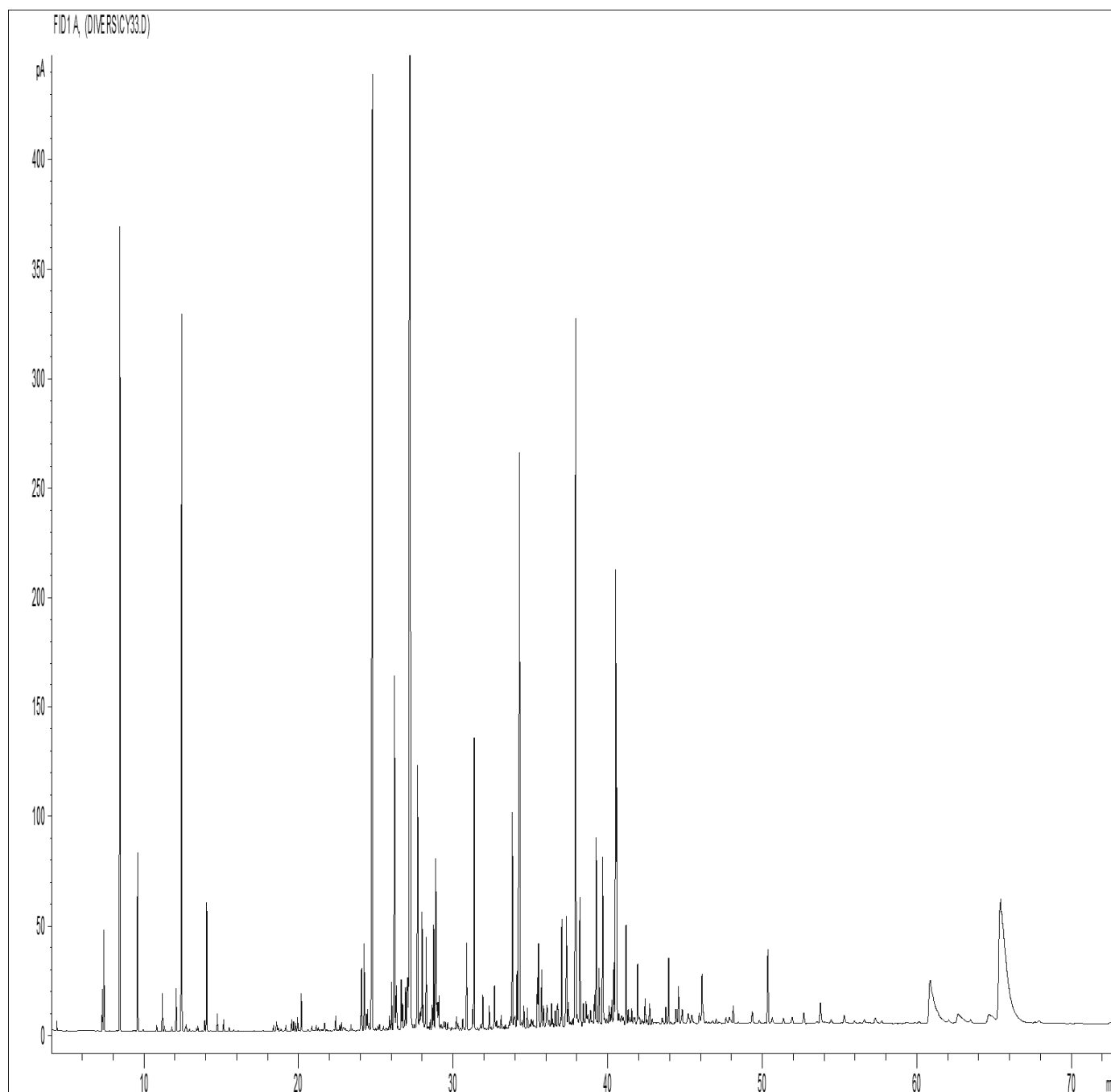


GAS CHROMATOGRAPHY (according to the norm NF ISO 11024)

Analysis conditions :

- . GC/MS Agilent 7890 / 5977 – Column : VF WAX (polaire) 60 m * 0.25 mm * 0.25 µm
- . GC/FID Agilent 6890 – Column : VF WAX (polaire) 60 m * 0.25 mm * 0.25 µm
- . Temperature program : 5 min to 60°C - 5°C/min until 250°C - 15 min 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 compounds are identified by a combination of retention times and mass spectra library (our own database and NIST commercial database).
- . Percentages are calculated from GC/FID peaks areas without using corrections factors.

Chromatographic profile :



Identification results : INULA GRAVEOLENS - BATCH N° IG1				
Pics	RT (min)	Compound name	%	Norm (%)
1	8.45	CAMPHENE	4.03	
2	9.60	beta-PINENE	0.87	
3	12.43	LIMONENE	3.99	
4	14.05	trans-beta-OCIMENE	0.61	
5	24.78	beta-CARYOPHYLLENE	7.23	
6	26.23	E-beta-FARNESENE	2.15	
7	27.24	BORNEOL	20.30	
8	27.72	GERMACRENE D	1.78	
9	28.00	beta-SELINENE	0.63	
10	28.27	BICYCLOGERMACRENE	0.57	
11	28.75	delta-CADINENE	0.58	
12	28.89	gamma-CADINENE	1.16	
13	30.89	NERYL PROPIONATE	0.51	
14	31.37	GERANYL PROPIONATE	1.56	
15	33.84	ISOPRENYL BENZOATE	1.18	
16	34.30	CARYOPHYLLENE OXIDE	4.63	
17	35.53	AROMATIC COMPOUND	0.54	
18	37.05	cis-3-HEXENYL BENZOATE	0.63	
19	37.35	HEXYL SALICYLATE	0.88	
20	37.94	T-CADINOL	4.75	
21	38.22	PRENYL SALICYLATE	0.98	
22	39.26	LACHNOPHYLLUM METHYL ESTER	1.10	
23	39.67	EUDESMA-7(11)-EN-4-OL	1.11	
24	40.51	MATRICARIA ESTER	2.85	
25	40.57	CARYOPHYLLA-2,6-DIEN-5-alpha-OL	1.29	
26	41.18	CEMBRENE	0.64	
27	50.36	10-ACETOXY-8,9-EPOXYTHYMOL ISOBUTYRATE	0.63	
28	60.86	COMPOUND Mw=234	2.21	
29	65.49	ARTEANNUIC ACID	8.12	
		TOTAL	77.50	