

Customer :

SENSOLEO E.U.

**Geibing 1
4792 MÜNZKIRCHEN
AUSTRIA**

Sample Nature : ESSENTIAL OIL

Botanical name : ROSMARINUS OFFICINALIS

Sample name : ROSMARINUS OFFICINALIS

Batch number : 22011

Origin : -

Plant part : FLOWERING TOP

Our reference : II59

Receipt : 07/09/2022

Analysis date : 13/09/2022

Packaging : Amber flask of 5 ml

Requested analysis : GCsimple

Sample storage : 1 year - room temperature

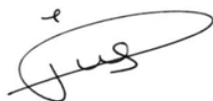
The above information is provided by the customer and sampling is under his responsibility

Comments :

This chromatographic profile complies with the ISO 1342 : 2012 standard relating to the Rosemary essential oil, Tunisian and Moroccan type.

Report validated by :

Line Pauset - *Laboratory manager*



Report written by :

Fanny Delater - *Analyst technician*

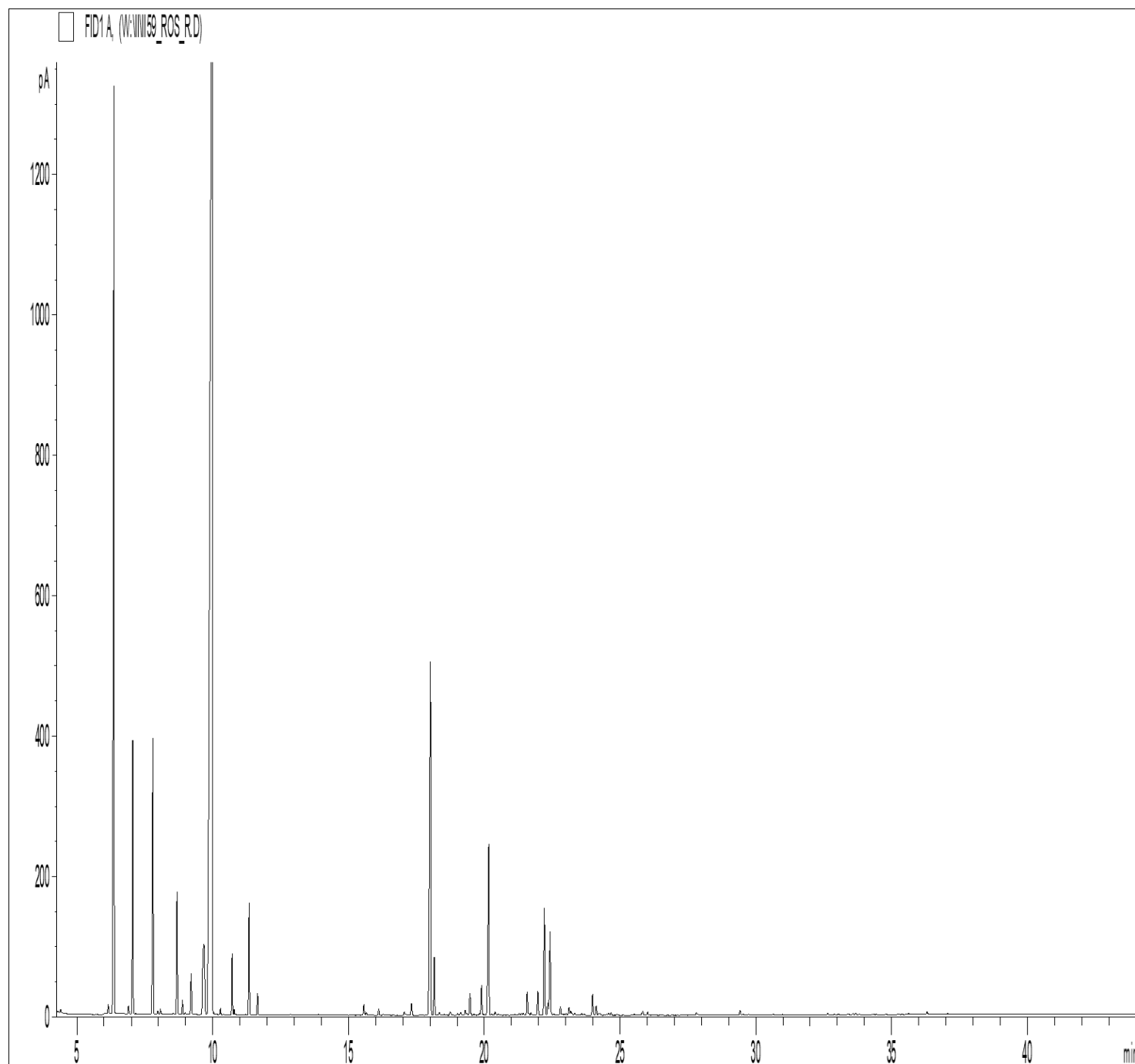


GAS CHROMATOGRAPHY (according to the norm NF ISO 11024)

Analysis conditions :

- . GC/MS Agilent 7890 / 5977 (Red) - Column : VF WAX (polar) 60 m * 0.25 mm * 0.25 µm
- . GC/FID Agilent 6890 – Column : VF WAX (polar) 60 m * 0.25 mm * 0.25 µm
- . Temperature program : (5S) 60°C - 5°C/min until 250°C - 20 min to 250°C
- . 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.
- . The reported compounds are those of the ISO standard (if applicable) or the characteristic compounds, and the other major compounds (> 1%), within the limit of 20 compounds maximum.

Chromatographic profile :



Identification results : ROSMARINUS OFFICINALIS - BATCH N° 22011

Peaks	RT (min)	Compound name	%	Norm (%)
1	6.37	alpha-PINENE	14.70	9 - 14
2	7.06	CAMPHENE	3.71	2.5 - 6
3	7.80	beta-PINENE	3.99	4 - 9
4	8.69	beta-MYRCENE	1.86	1 - 2
5	9.68	LIMONENE	2.57	1.5 - 4
6	9.98	1,8-CINEOLE	47.31	38 - 55
7	11.34	p-CYMENE	1.61	0.5 - 2.5
8	18.02	CAMPHOR	8.02	5 - 15
9	18.16	LINALOOL	0.90	0.3 - 2
10	19.48	BORNYL ACETATE	0.39	0.1 - 1.6
11	20.17	beta-CARYOPHYLLENE	3.69	
12	22.22	alpha-TERPINEOL	1.97	1 - 2.5
13	22.43	BORNEOL	1.58	1 - 5
14	22.81	VERBENONE	0.16	< 0.4
		TOTAL	92.46	