

# Laboratoire Rosier Davenne

## CERTIFICATE OF ANALYSIS

Model/Product/Revision/Date of revision : BAHEEN001 / Green Mandarin EO / 0 / 08-02-19  
Modification(s) : none  
Published : 04/02/2021

p1/1

### Green Mandarin EO

Laboratoire Rosier Davenne code : 01M/CITRET

Date of analysis : 28/02/2020

Batch number : 044PE002

Retest date (shelf life): 09/2021

#### ❖ General description

Essential oil	Green Mandarin EO	Origin	Argentina
Latin name	<i>Citrus reticulata</i>		

#### ❖ Sensory quality

Aspect	Mobile liquid	Conform
Color	Brownish green	Conform
Odor	Characteristic of the peel of the fruit	Conform

#### ❖ Analytical quality

	Laboratoire Rosier Davenne specifications	Results	Conclusion
Density (20°C)	0,840 - 0,860	0.851	Conform
Refractive index (20°C)	1,4650 - 1,4850	1.4749	Conform
Optical rotation (20°C)	Not Determined	Not Determined	Not Determined
Peroxide index	< 20 mmols/L	3.2	Conform

#### ❖ Chromatography analyse

GC : Perkin Elmer - Clarus

Column : see report

Injection : split

Detector : FID

Carrier gas : H2

-> See chromatography attached

#### ❖ Conclusion

Batch accepted.

Software Version : 6.3.4.0700  
Sample Name : HE Mandarine verte 044PE002  
Instrument Name : Clarus 590  
Rack/Vial : 0/2  
Sample Amount : 1.000000  
Cycle : 1

Date : 02/03/2020 10:50:45  
Data Acquisition Time : 28/02/2020 16:54:58  
Channel : B  
Operator : Sarah  
Dilution Factor : 1.000000

Result File :  
Sequence File : C:\Clarus 590\Sequences\2020\200228.seq

## Rapport d'analyse - Laboratoire Rosier Davenne

Colonne polaire : Elite-Wax 60m, Ø 0,25mm, 0.25µm df

Pic #	Component Name	Tr [min]	Area [%]
1	pinene <alpha>	6.05	1.95
2	thujene <alpha>	6.12	0.68
3	camphene	6.97	0.01
4	pinene <beta>	7.99	1.41
5	sabinene	8.33	0.28
6	myrcene	9.57	1.79
7	phellandrene<alpha>	9.64	0.02
8	terpinene <alpha>	10.08	0.33
9	limonene	10.87	72.64
10	phellandrene <beta>	11.04	0.22
11	terpinene <gamma>	12.39	17.77
12		12.52	0.04
13	cymene <p>	13.16	0.47
14	terpinolene	13.65	0.66
15		13.80	0.09
16		17.82	0.03
17		20.57	0.03
18		21.95	0.07
19		23.80	0.06
20	linalool	23.86	0.13
21		25.54	0.04
22	caryophyllene <E>	25.75	0.08
23	terpinen-4-ol	25.85	0.03
24	terpineol <alpha>	29.39	0.16
25		29.88	0.04
26		30.44	0.03
27	farnesene <(E,E)-alpha>	31.52	0.29
28	methyl anthranilate <methyl,n>	41.97	0.34
29		45.65	0.07
30	sinensal <alpha>	49.87	0.23
			100.00

# Chromatogram

Sample Name : HE Mandarine verte 044PE002      Sample # : 4      Page 1 of 1  
File Name : C:\Clarus 590\Data\Colonne Polaire\2020\200228\_HE Mandarine verte 044PE002\_004.raw  
Date : 02/03/2020 10:51:08  
Method : Mandarine verte.mth      Time of Injection: 28/02/2020 16:54:58  
Start Time : 0.00 min      End Time : 80.00 min      Low Point : -45.07 mV      High Point : 954.93 mV  
Plot Offset: -45.07 mV      Plot Scale: 1000.0 mV

