

## Certificate of Analysis

Product: Marjoram Oil (Spain)  
Botanical Name: *Thymus mastichina*  
Origin: Spain  
Plant Part used: Leaves and flowering heads  
Extraction: Steam distilled

<b>Physical data</b>	<b><u>Specification</u></b>	<b><u>Result</u></b>
Appearance:	Clear mobile liquid	Complies
Colour:	Pale straw yellow to yellow	Complies
Odour:	Characteristic	Complies
Specific Gravity at 20°C:	0.870 to 0.920	0.908
Refractive index at 20°C:	1.458 to 1.480	1.464
Optical Rotation at 20°C:	-50° to +30°	+1°

### Chromatographic Profile

<b>Sample</b>	<b>Component</b>	<b>Specification Peak Area (%)</b>	<b>Result Peak Area (%)</b>
<i>Thymus mastichina</i>	a-Pinene	Trace to 5.0	3.2
	Sabinene	Trace to 5.0	2.1
	b-Pinene	Trace to 8.0	4.4
	b-Myrcene	Trace to 8.0	1.4
	d-Limonene	Trace to 5.0	3.1
	1,8 Cineole	38.0 to 65.0	58.4
	Linalool	10.0 to 35.0	15.4
	a-Terpineol	Trace to 5.0	3.4