

## Certificate of Analysis

Product: Marjoram Sweet Oil (Egypt) – 100% Organic ACO/USDA  
Botanical Name: *Origanum marjorana*  
Origin: Egypt  
Plant part used: Leaves and flowering heads  
Extraction: Steam distilled

<b>Physical data</b>	<b><u>Specification</u><sup>2</sup></b>	<b><u>Result</u></b>
Appearance:	Clear mobile liquid	Complies
Colour:	Pale straw to yellow	Complies
Odour:	Warm, camphoraceous	Complies
Relative Density at 20°C:	0.8700 to 0.9100	0.8960
Refractive Index at 20°C:	1.4600 to 1.4800	1.4732
Optical Rotation:	+30.00 <sup>0</sup> to -5.00 <sup>0</sup>	+18.30 <sup>0</sup>

### Chromatographic Profile

<b>Sample</b>	<b>Component</b>	<b>Specification<sup>2</sup> Peak Area<sup>1</sup> (%)</b>	<b>Result Peak Area<sup>1</sup> (%)</b>
<i>Origanum marjorana</i>	Sabinene	2 to 10	5.87
	b-Myrcene	Trace to 5	1.51
	a-Terpinene	2 to 15	9.08
	g-Terpinene	5 to 20	14.06
	Cis-Sabinene hydrate	4 to 30	9.55
	Terpinene-4-ol	10 to 36	24.96
	Linalyl acetate	Trace to 5	3.49
	b-Caryophyllene	Trace to 5	2.68