



NHR ORGANIC OILS  
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*Certificate of Analysis & Gas Chromatography*  
**Organic Tea Tree Essential Oil**  
*(Melaleuca alternifolia)*

BATCH NUMBER: 220322-3
PRODUCT INCI: MELALEUCA ALTERNIFOLIA LEAF OIL
CAS NUMBER: 85085-48-9 / 8022-72-8 / 68647-73-4
EINECS NUMBER: 285-377-1

ANALYTICAL DETAILS	RANGE	RESULTS
APPEARANCE	LIQUID	-
COLOUR	COLORLESS – PALE YELLOW	-
ODOUR	CHARACTERISTIC	-
SPECIFIC GRAVITY @ 20°C	0.885 – 0.906	0.8926
REFRACTIVE INDEX @ 20°C	1.470 – 1.482	1.47855
OPTICAL ROTATION (°C)	+5.0 TO +15.0	+9.15
1.8 CINEOLE CONTENT (%)	MAX 5.0	-
TERPINENE-4-OL (%)	MIN 35.0	37.61

R.Time	Name	Area%	Fairoils SRL norm (%)
9.812	3-cis-Hexenol	0.019	
13.408	alpha-Thujene	0.944	
<b>13.868</b>	<b>alpha-Pinene</b>	<b>2.259</b>	<b>1.0-4.0</b>
<b>16.142</b>	<b>Sabinene</b>	<b>0.777</b>	<b>S 3.5</b>
16.478	beta-Pinene	0.726	
17.087	Myrcene	0.776	
18.234	alpha-Phellandrene	0.462	
<b>19.007</b>	<b>alpha-Terpinene</b>	<b>10.320</b>	<b>6.0-12.0</b>
<b>19.429</b>	<b>para-Cymene</b>	<b>1.059</b>	<b>0.5-8.0</b>
<b>19.750</b>	<b>Limonene</b>	<b>0.978</b>	<b>0.5-1.5</b>
19.874	beta-Phellandrene	0.964	
<b>19.996</b>	<b>1,8-Cineole</b>	<b>3.840</b>	<b>S 10.0</b>
<b>21.830</b>	<b>gamma-Terpinene</b>	<b>18.712</b>	<b>14.0-28.0</b>
22.496	cis-Sabinene hydrate	0.110	

<b>23.582</b>	<b>Terpinolene</b>	<b>3.406</b>	<b>1.5-5.0</b>
24.478	Linalool	0.037	
24.620	trans-Sabinene hydrate	0.308	
26.277	cis-para-Menth-2-en-1-ol	0.540	
27.567	trans-para-Menth-2-en-1-ol	0.375	
<b>30.597</b>	<b>Terpinen-4-ol</b>	<b>37.685</b>	<b>35.0-48.0</b>
<b>31.346</b>	<b>alpha-Terpineol</b>	<b>2.900</b>	<b>2.0-5.0</b>
31.439	cis-Piperitol	0.117	
32.211	trans-Piperitol	0.192	
40.613	delta-Elemene	0.106	
41.606	alpha-Cubebene	0.089	
43.191	Isoledene	0.054	
43.523	alpha-Copaene	0.216	
44.389	beta-Elemene	0.041	
<b>44.942</b>	<b>Methyl eugenol</b>	<b>0.018</b>	<b>&lt;0.1</b>
45.574	beta-Maaliene	0.417	
45.837	alpha-Gurjunene	0.028	
46.379	beta-Caryophyllene	0.629	
46.841	9-epi-cis-Caryophyllene	0.052	
47.294	alpha-Maaliene	0.066	
<b>47.569</b>	<b>Aromadendrene</b>	<b>1.125</b>	<b>0.2-3.0</b>
47.770	alpha-Guaiene	0.055	
48.025	Myrtayl-4(12)-ene	0.179	
48.213	trans-Muurolo-3,5-diene	0.274	
48.633	alpha-Humulene	0.116	
48.913	allo-Aromadendrene	0.590	
49.639	cis-Cadina-1(6),4-diene	0.506	
50.582	delta-Selinene	0.134	
50.704	beta-Selinene	0.184	
<b>50.846</b>	<b>Viridiflorene</b>	<b>1.215</b>	<b>0.1-3.0</b>
51.141	Bicyclogermacrene	1.899	
51.262	alpha-Muuroloene	0.184	
<b>52.479</b>	<b>delta-Cadinene</b>	<b>1.542</b>	<b>0.2-3.0</b>

<b>STORAGE CONDITIONS</b>
STORE IN A COOL DRY PLACE AWAY FROM HEAT & SUNLIGHT

The attached information is considered to be correct at the time the client received this information.  
Please be aware that detail can change and we encourage clients to update their records with NHR regularly.  
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