

## CERTIFICATE OF ANALYSIS

Description: Rosemary Oil E.P.  
 Yr. Order No.: 21/080420  
 F+L Order No.: 22006476 Pos.: 2  
 Batch/Lot-No.: 1202235  
 Production date: 20.04.2020  
 Date of analysis: 30.04.2020  
 Best before use: 19.04.2023  
 Characters: A clear, mobile, colourless to pale yellow liquid, with a characteristic odour .

Analytical Data	Method	Target Value	Measured Value
<b>Identification:</b>			
GC	Method Ph.Eur.	must comply	complies
<b>Purity:</b>			
Relative density (d <sub>20</sub> /20)	2.2.5	0.895 - 0.920	0.9111
Optical rotation (α <sub>20</sub> )	2.2.7	-5 - +8 °	+0.8 °
Refractive index (n <sub>D</sub> 20)	2.2.6	1.464 - 1.473	1.4672
Acid value	2.5.1_FL	≤ 1.0	0.1
<b>Chromatographic profile:</b>			
alpha-Pinene	2.2.28_FL WAX 35	9.0 - 14.0 %	11.6 %
Camphene	2.2.28_FL WAX 35	2.5 - 6.0 %	4.3 %
beta-Pinene	2.2.28_FL WAX 35	4.0 - 9.0 %	7.5 %
beta-Myrcene	2.2.28_FL WAX 35	1.0 - 2.0 %	1.5 %
Limonene	2.2.28_FL WAX 35	1.5 - 4.0 %	2.2 %
1,8-Cineole	2.2.28_FL WAX 35	38.0 - 55.0 %	45.9 %
para-Cymene	2.2.28_FL WAX 35	0.8 - 2.5 %	1.1 %
Camphor	2.2.28_FL WAX 35	5.0 - 15.0 %	9.5 %
Bornyl acetate	2.2.28_FL WAX 35	0.1 - 1.5 %	0.9 %
alpha-Terpineol	2.2.28_FL WAX 35	1.0 - 2.6 %	1.8 %
Borneol	2.2.28_FL WAX 35	1.5 - 5.0 %	2.8 %
Verbenone	2.2.28_FL WAX 35	≤ 0.4 %	n.d.

This product complies in all points with the above-mentioned monograph.