

## Certificate of Analysis - Roman Chamomile Essential Oil

Sample: Roman Chamomile Oil  
Species: Anthemis nobilis  
Origin: USA

### Main Components

ID	Area %
Isobutyl isobutyrate	0.74
alpha-pinene	2.23
Butyl methacrylate	0.79
2-Methylbutyl 2-methylpropionate	1.07
amyl methacrylate	1.38
Isobutyl angelate	25.31
2-Methylbutyl angelate	4.65
isobutyl tiglate	5.52
2-methylbutyl 2-methylbutyrate	28.83
Isoamyl angelate	5.43
Isoamyl tiglate	5.47
Total Identified	81.42

This oil, though different chemically than the typical US Oregon variety, is considered to be of excellent quality with high ester content and low terpenes. Typically, alpha-pinene levels run about 5 - 12% in the Oregon type Roman chamomile which has a negative effect on the odor profile. This variety has relatively very low alpha-pinene at 2.23%. In addition, total ester content is above 90%, many of the esters still have not been positively identified. Odor quality is the best ever observed by this lab for Roman chamomile and has a very nice ocean-blue color due to a trace amount of chamazulene in the oil. The blue color is maintained by keeping the oil refrigerated with little airspace in the storage