

CERTIFICATE OF ANALYSIS
Chamomile Essential oil

Product Name: Chamomile Essential oil

Botanical Name: *Matricaria chamomilla* L.

Extraction process: hydro-distillation

Characteristic	Test results	Acceptance limit	Test Method
Appearance	Compiles	Liquid	-
Color	Compiles	Blue	
Odor	Compiles	Chamomile Odor	
Optical Rotation	Compiles	+00 to +8	-
Refractive Index	Compiles	1.480-1.505	
Density at 20 °C	Compiles	0.890 - 0.905	
Chemical Composition of essential oil			GC-MS analysis
α-Pinene	7.43	Trans-β-farnesene: 2-51% α-Bisabolol oxide B:2-21% Bisabolone oxide A:1-4% α-bisabolol:15-40% Chamazulene: 5-22% α-Bisabolol oxide B:2-27%	
β-Pinene	3.55		
Cymene	1.72		
1,8-Cineole	2.46		
Limonene	8.07		
4-Terpineol	5.29		
trans-Caryophyllene	5.53		
α-Himachalene	8.09		
trans-β-Farnesene	9.6		
γ-himachalene	4.96		
Cadina-1,4-Diene	2.37		
β-Himachalene	20.03		
2-Propenylthiobenzene	1.28		
Bisabolol oxide B	0.30		
(Z)-γ-Atlantone	0.90		
(E)-γ-Atlantone	0.70		
(Z)-α-Atlantone	0.20		
α-Bisabolol oxide	2.64		
chamazulene	14.79		