

Certificate of Analysis

Product: Spearmint Oil – BIO

Botanical Name: *Mentha spicata L.*

Country of Origin: India

PHYSICAL AND CHEMICAL PROPERTIES

TEST	RESULT	SPECIFICATION
Specific Gravity @ 20° C	0.921	0.920 - 0.940
Refractive Index @ 20° C	1.485	1.480 - 1.495
Optical Rotation @ 20° C	-55°	-60° - -45°

GAS CHROMATOGRAPH ANALYSIS (TYPICAL)

CONSTITUENT	RESULT (%)	SPECIFICATION (%)
α pinene	1.21	
camphene	<0.05	
β pinene	1.20	
sabinene	0.64	
myrcene	2.07	
α terpinene	0.16	
limonene	21.99	15.00 – 25.00
β phellandrene	0.06	
cineole-1.8	1.78	
cis β ocimene	0.08	
γ terpinene	0.28	
trans β ocimene	<0.05	
paracymene	0.32	
terpinolene	0.11	
octanol 3	0.41	
trans sabinene hydrate	0.33	
menthone	0.26	
isomenthone	<0.05	
α copaene	<0.05	
β bourbonene	1.04	
linalol	0.05	

terpinen-4-ol +	1.61	
β caryophyllene		
cis dihydrocarvone	1.25	
trans dihydrocarvone	0.21	
menthol	1.03	
pulegone	0.05	
trans β farnesene	0.22	
dihydrocarvyl acetate	0.34	
borneol	0.32	
germacrene d	0.29	
cis carvyl acetate	0.4	
carvone	59.47	55.00 – 75.00
trans carvyl acetate	0.14	
trans carveol	0.47	
cis carveol	0.2	
cis jasmone	0.06	