

CERTIFICATE OF ANALYSIS

PRODUCT NAME: PINE OIL
COUNTRY OF ORIGIN: CHINA
BOTANICAL NAME: *Pinus spp.*

TEST (UNIT)	SPECIFICATION	RESULT
APPEARANCE	MOBILE LIQUID	MOBILE LIQUID
COLOUR	COLOURLESS TO ALMOST COLOURLESS	ALMOST COLOURLESS
CLARITY	CLEAR, NO FOREIGN MATTER	CLEAR, NO FOREIGN MATTER
ODOUR	SWEET, PINE-WOODY, BALSAMIC-ANISE	CHARACTERISTIC
SPECIFIC GRAVITY @ 20°C	0.900 to 0.939	0.908
OPTICAL ROTATION @ 20°C	-10° to +10°	-1°
REFRACTIVE INDEX @ 20°C	1.474 to 1.489	1.478
CHROMATOGRAPHIC PROFILE		
A-PINENE (%)	Trace to 5	2
CAMPHERE (%)	Trace to 5	1
1,4-CINEOLE (%)	Trace to 12	8
LIMONENE (%)	Trace to 12	6
1,8-CINEOLE (%)	Trace to 12	5
FENCHOL (%)	Trace to 12	3
TERPINEN-1-OL (%)	5 to 15	7
A-TERPINEOL (%)	5 to 30	25
G-TERPINEOL (%)	Trace to 10	7
G-TERPINENE (%)	Trace to 5	2