

## Certificate of Analysis

Product: Pine Scotch Oil

Botanical Name: *Pinus sylvestris* L.

Country of Origin: Austria

### PHYSICAL AND CHEMICAL PROPERTIES

TEST	RESULT
Relative Density @ 20° C	0.8637
Refractive Index @ 20° C	1.47202
Optical Rotation @ 20° C	-20.07

### GAS CHROMATOGRAPH ANALYSIS (TYPICAL)

CONSTITUENT	RESULT (%)
Santene	0.053
Tricyclene	0.092
Alpha-Pinene	40.691
Fenchene	0.047
Camphene	1.024
Thuja-2,4,(10)-diene	0.029
Beta-Pinene	19.503
Myrcene	3.244
Para-Mentha-1(7),8-diene	0.097
Alpha-Phellandrene	0.208
Delta-3-Carene	16.372
1,4-Cineole	0.070
Alpha-Terpinene	1.191
Ortho-Cymene	0.014
1-Para-Menthene	0.044
Para-Cymene	1.338
Limonene	9.083
Beta-Phellandrene	0.532
Eucalyptol	0.136
(E)-Beta-Ocimene	0.018
Gamma-Terpinene	0.148
Terpinolene	0.812
Para-Cymenene + Fenchone	0.028
Linalol	0.022
Endo-Fenchl	0.043

1-Terpineol	0.009
Tarns-Verbenol	0.032
Borneol	0.044
Terpinene-4-ol	0.020
Cryptone	0.014
Alpha-Terpineol	0.455
Myrtenal	0.022
Acetate de Linalyle	0.021
Acetate de Bornyle	1.458
Alpha-Cubebene	0.022
Alpha Longipinene	0.065
Alpha-Copaene	0.047
Longifolene	0.548
Beta-Caryophyllene	1.783
Hydrocarbure Sesquiterpenique	0.016
Hydrocarbure sesquiterpenique MW204	0.012
Alpha-Humulene	0.244
Hydrocarbure sesquiterpenique MW204	0.022
Gamma-Murolene	0.010
Alpha- Muurolene + Bicyclogermacrene	0.015
Delta-Cadinene	0.064
Cis-Calamenene	0.020
Oxyde de Caryophyllene	0.040