

Certification of analysis

Product: Lime Oil

Botanical Name: Citrus aurantifolia

Parameter Specification1 Result

Appearance: Clear, mobile liquid Complies

Colour: Colourless to pale yellow Complies

Odour: Characteristic lime citrus Complies

Physical data

Refractive Index @ 20 ° C: 1.4690 – 1.4890 Conform

Optical Rotation: + 30.00 ° to + 45.00 Conform

Specific Gravity @ 20 ° C: 0.8580 – 0.8710 Conform

Chromatographic

Profile Sample : Citrus aurantifolia Result(%)

Alpha-thujene 0.44

Alpha-pinene 1.72

Comphene 0.05

Sabinene 1.83

Beta-pinene 11.42

Myrcene 1.39

Alpha-phellandrene 0.05

Alpha-terpinene 0.27

p-cymene 0.37

limonene 57.91

cis-beta-ocimene 0.05

trans-beta-ocimene 0.12

gamma-terpinene 13.14

terpinolene 0.55

linalool 0.21

terpinene-4-ol 0.08

alpha-terpineol 0.25

n-decanal 0.07

nerol 0.15

neral 1.29

geranial 2.09

delta-elemene 0.10
neryl acetate 0.94
geranyl acetate 0.22
beta-elemene 0.16
dodecanal 0.04
cis-alpha-bergamotene 0.07
beta-caryophyllene 0.57
trans-alpha-bergamotene 1.07
alpha-humulene 0.10
germacrene D 0.07
cis-alpha-bisabolene 0.19
beta-bisabolene 1.45
germacrene B 0.07
7-methoxycoumarin 0.17
5,7-dimethoxycoumarin 0.15
Bergaptene 0.09

*ロットごとの成分表には代表的な成分のみ記載

Note(1)Analytical conditions:GC COLUMNS:Rxi-5SI 1 MS, Length:30.0m, Inside
Diameter:0.25mm,
Thickness:0.25

Mass Spectrometer: Detector Type:Quadrupole Ms, Ion Source:EI, Ion Source Temp:200.0C
Oven Temp Program:Rate:5.0Temperature(Degree):50.0-270.0