

Certification of analysis

1. PRODUCT IDENTIFICATION AND COMPOSITION

1.1 Product Name: Marjoram sweet

1.2 Botanical Name: *Origanum marjorana* TEST SPECIFICATION RESULT

2. PHYSICAL AND CHEMICAL PROPERTIES

2.1 Appearance: Clear mobile liquid Conforms

2.2 Odour: Characteristic Conforms

2.3 Specific Gravity: 0.8700 to 0.920 @ 20° C Conforms

2.4 Refractive Index: 1.4580 to 1.4800 @ 20° C Conforms C

ONSTITUENT SPECIFICATION RESULT

3. GAS CHROMATOGRAPH ANALYSIS

Alpha-thujene 0.78

Alpha-pinene 0.85

Camphene 0.03

Sabinene 8.90

Beta-pinene 0.48

3-octanone 0.01

Myrcene 2.22

Alpha-phellandrene 0.51

Alpha-terpinene 8.68

p-cymene 1.28

limonene, beta-phellandrene 4.25

cis-beta-ocimene 0.02

trans-beta-ocimene 0.04

gamma-terpinene 13.78

cis-sabinene

hydrate 3.68

terpinolene 3.17

linalool, trans-sabinene hydrate 14.94

cis-p-menth-2-en-1-ol 1.55

trans-p-menth-2-en-1-ol 0.90

terpinene-4-ol 21.31

alpha-terpineol 3.27

cis-piperitol 0.61
methyl chavicol 0.00
trans-piperitol 0.41
citronellol 0.06
sabinene hydrate acetate 0.88
linalyl acetate 1.23
geranial 0.05
trans-anethole 0.08
bornyl acetate 0.02
delta-elemene 0.13
neryl acetate 0.02
geranyl acetate 0.04
beta-caryophyllene 2.64
alpha-humulene 0.12
bicyclogermacrene 1.56

バッチごとの成分表には代表的成分のみ記載

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