

Certification of analysis

1. PRODUCT IDENTIFICATION AND COMPOSITION

1.1 Product Name:Peppermint Arvensis Essential Oil

1.2 Botanical Name: Mentha arvensis

1.3 Batch no: 242686

TEST SPECIFICATION RESULT

2. PHYSICAL AND CHEMICAL PROPERTIES

2.1 Appearance: Clear, colourless to yellow liquid Conforms

2.2 Odour: Characteristic Conforms

2.3 Specific Gravity: 0.850 to 0.920 @ 20° C Conforms

2.4 Refractive Index: 1.455 to 1.475 @ 20° C Conforms

CONSTITUENT SPECIFICATION RESULT

3. GAS CHROMATOGRAPH ANALYSIS

Sample:Mentha arvensis Result(%)

Alpha-pinene 0.82

Sabinene 0.31

Beta-pinene 0.85

Myrcene 0.57

Octan-3-ol 0.27

Limonene 3.16

1,8-cineole 0.07

Linalool 0.06

Isopulegol 0.76

Methone 6.54

Isomenthone 4.14

Neo-menthol 1.48

Menthol 74.16

Terpinene-4-ol 0.23

Neo-isomenthol 0.32

Isomenthol 0.08

Alpha-terpineol 0.14

Cis-3-hexenyl-2-methyl butyrate 0.29

Pulegone 0.70

Piperitone 0.46

Menthyl acetate 3.41

Beta-bourbonene 0.12

Beta-caryophyllene 0.32

Germacrene D 0.37

Bicyclogrmacrene 0.09

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