

Certification of analysis

1. PRODUCT IDENTIFICATION AND COMPOSITION

1.1 Product Name:Fennel Sweet Oil

1.2 Botanical Name: Foeniculum vulgare dulce TEST SPECIFICATION RESULT

2. PHYSICAL AND CHEMICAL PROPERTIES

2.1 Appearance:Clear free flowing liquid

2.2 Odour: Sweet, slightly peppery, spicy odour reminiscent of anise

2.3 Specific Gravity: 0.953 to 0.985@ 20° C Conforms

2.4 Refractive Index: 1.528 to 1.552 @ 20° C Conforms

2.5 Colour ; colourless to pale yellow

CONSTITUENT SPECIFICATION RESULT

3. GAS CHROMATOGRAPH ANALYSIS

Result(%)

Alpha-thujene 0.01

Alpha-pinene 2.18

Camphene 0.09

Sabinene 0.05

Beta-pinene 0.14

Myrcene 0.32

Alpha-phellandrene 0.59

Alpha-terpinene 0.01

p-cymene 0.12

limonene, beta-phellandrene 0.76

cis-beta-ocimene 0.03

gamma-terpinene 0.18

fenchone 5.50

camphor 0.18

methyl chavicol 2.96

cis-anethole, p-anisic aldehyde 0.44

trans-anethole 85.97

Note(1)Analytical conditions:GC Columns:Rxi-5SI 1 MS, Length:30.0m, Inside

Diameter:0.25mm, Thickness:0.25

Mass Spectrometer: Detector Type:Quadropole Ms, Lon Source:EI, Ion Source Temp:200.0C

Oven Temp Program:Rate:5.0Temperature(Degree):50.0-270.0