Flavors and aromas

Separation of a-pinene, limonene and linalool

Application Note

Food Testing & Agriculture

Authors

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Introduction

Agilent CP-Chirasil-Dex CB is one of the few chiral stationary phases that is chemically bonded and combines a high selectivity with a high inertness for optical isomers. The majority of compounds can be analyzed without derivatization. Resolution factors can be improved by using electronic pressure or flow programming.

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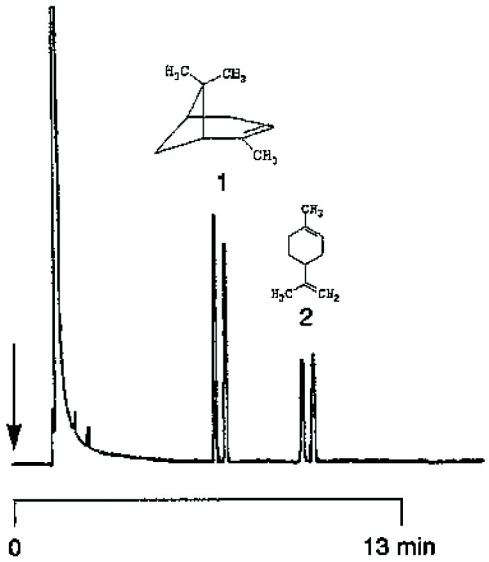
Conditions

Technique	:	GC-capillary
Column	:	Agilent CP-Chirasil-Dex CB, 0.25 mm x 25 m fused silica WCOT CP-Chirasil-Dex CB (df = 0.25 µm) (Part no. CP7502)
Temperature	:	Chromatogram A: 85 °C Chromatogram B: 100 °C
Carrier Gas	:	H_2, 50 kPa (0.5 bar, 7 psi)
Injector	:	Split, 100 mL/min T = 275 °C
Detector	:	FID T = 300 °C
Sample Size	:	0.2 µL
Concentration Range	:	0.05 %

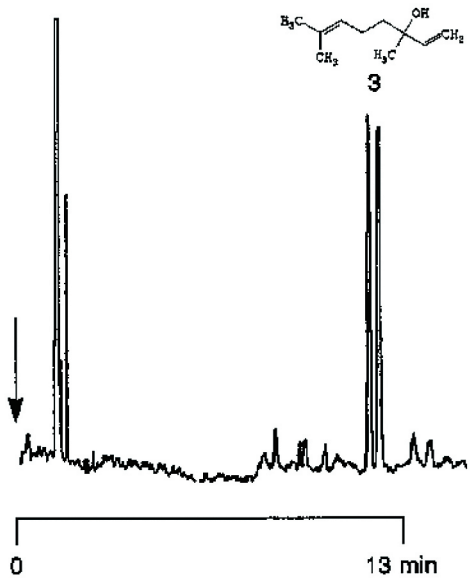
Peak identification

1. α-pinene
2. limonene
3. linalool

Chromatogram A



Chromatogram B



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