



Flavors and aromas

Analysis of terpenes in turpentine

Application Note

Materials Testing & Research

Authors

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Introduction

A long, thickfilm Agilent CP-Sil 5 CB column analyzes some terpenes in a complex matrix. Between 25 and 35 minutes, the heavier fractions of the turpentine sample elute from the column.



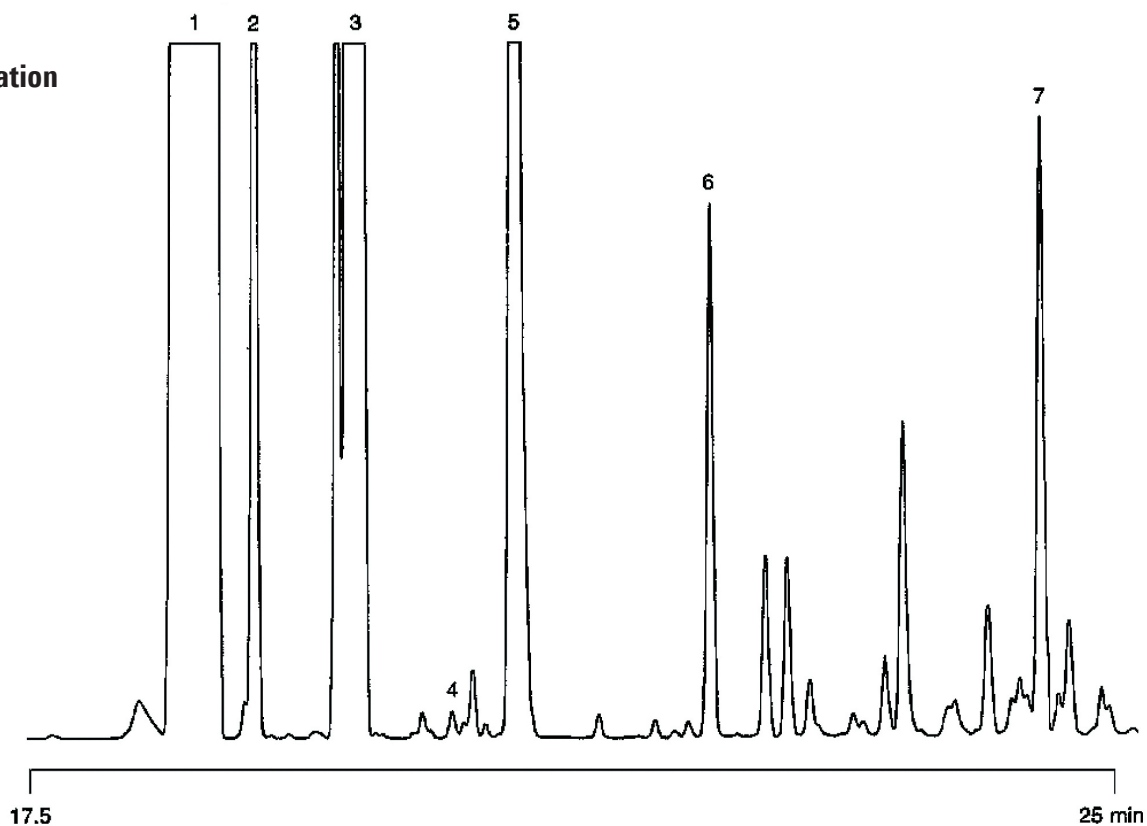
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Conditions

Technique : GC-capillary
Column : Agilent CP-Sil 5 CB 0.32 mm x 50 m fused silica
WCOT CP-Sil 5 CB (df = 1.2 μ m) (Part no. CP7770)
Temperature : 45 °C (10 min) \rightarrow 175 °C, 10 °C/min
Carrier Gas : He, 100 kPa (10 bar, 14 psi)
Injector : Splitter, split flow 30 mL/min
T = 250 °C
Detector : FID
T = 260 °C
Sample Size : 0.5 μ L
Concentration Range : 100 ppm - 0.1%
Solvent Sample : turpentine

Peak identification

1. α -pinene
2. camphene
3. β -pinene
4. Δ^3 -carene
5. limonene
6. terpinolene
7. α -terpineol



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This information is subject to change without notice.

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