Flavors and aromas

Analysis of terpineol in pine oil

Application Note

Materials Testing & Research

Authors

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Introduction

The most polar, bonded Carbowax phase, Agilent CP-Wax 57 CB, is the only column of this kind that separates β-phenandrene from 1,8-cineol and a-terpinene from 1,4-cineol, if present.

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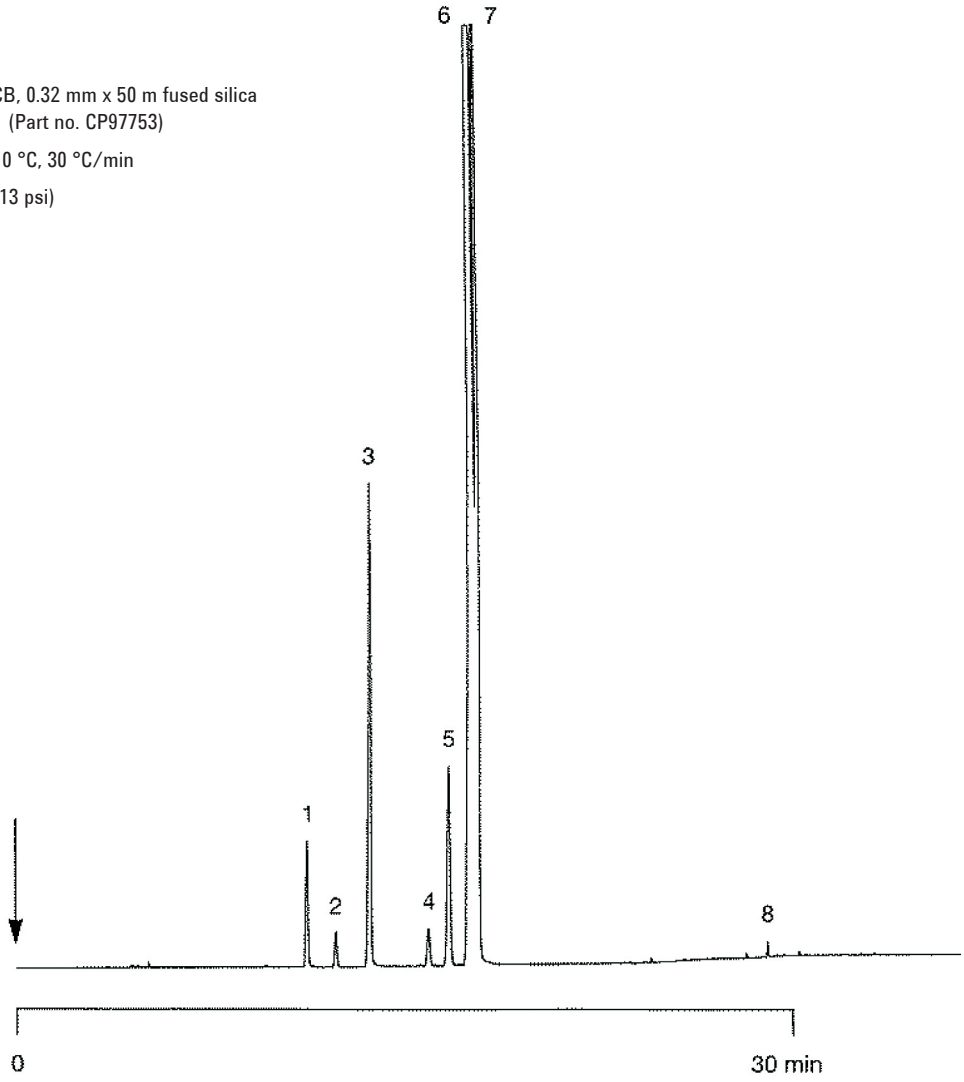
Conditions

Technique	:	GC-capillary
Column	:	Agilent CP-Wax 57 CB, 0.32 mm x 50 m fused silica WCOT (df = 0.2 µm) (Part no. CP97753)
Temperature	:	70 °C (15 min) ⟶ 210 °C, 30 °C/min
Carrier Gas	:	N_2, 90 kPa (0 .9 bar, 13 psi)
Injector	:	Split, 150 mL/min T = 240 °C
Detector	:	FID T = 250 °C
Sample Size	:	0.03 µL
Concentration Range	:	undiluted sample

Peak identification

1. terpinen-3-ol-1
2. terpinen-4-ol (terpinen-1-ol-4)
3. cis-β-terpineol
4. δ-terpineol
5. trans-β-terpineol
6. α-terpineol
7. γ-terpineol
8. terpin



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Printed in the USA
31 October, 2011
First published prior to 11 May, 2010
A01459

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