



Flavors and aromas

Menthol analysis in peppermint oil

Application Note

Food Testing & Agriculture

Authors

Agilent Technologies, Inc.

Introduction

Gas chromatography with an Agilent CP-Cyclodextrin-B-2,3,6-M-19 column separates five menthols in peppermint oil in 32 minutes.



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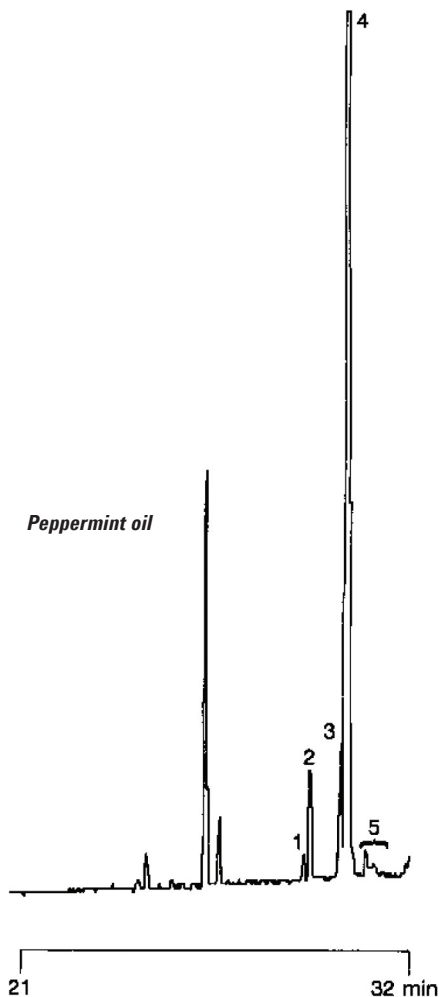
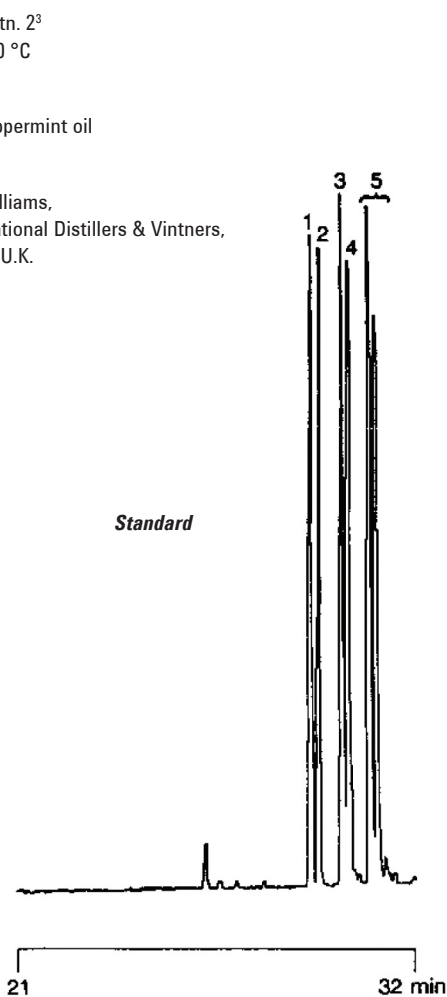
Conditions

Technique : GC-capillary
Column : Agilent CP-Cyclodextrin-B-2,3,6-M-19, 0.25 mm x 25 m fused silica WCOT CP-Cyclodextrin-B-2,3,6-M-19 (df = 0.25 µm) (Part no. CP7500)
Temperature : 50 °C (5 min) → 180 °C, 3 °C/min
Carrier Gas : He, 90 kPa (0.9 bar, 13 psi)
Injector : Splitter, 100 mL/min
Detector : FID, Attn. 2³
T = 250 °C
Sample Size : 0.2 µL
Concentration Range : 1% peppermint oil

Courtesy : Mr. Williams,
International Distillers & Vintners,
Essex, U.K.

Peak identification

1. (+)-neomenthol
2. (-)-neomenthol
3. (+)-menthol
4. (-)-menthol
5. isomenthol



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This information is subject to change without notice.

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