Enantiomers

Analysis of racemic aromatic alcohols (phenyl substituted alcohols)

Application Note

Materials Testing & Research

Authors

Agilent Technologies, Inc.

Introduction

Gas chromatography with an Agilent CP-Chirasil-DEX CB column separates enantiomers of six racemic aromatic alcohols (phenyl substituted alcohols) in 15 minutes.

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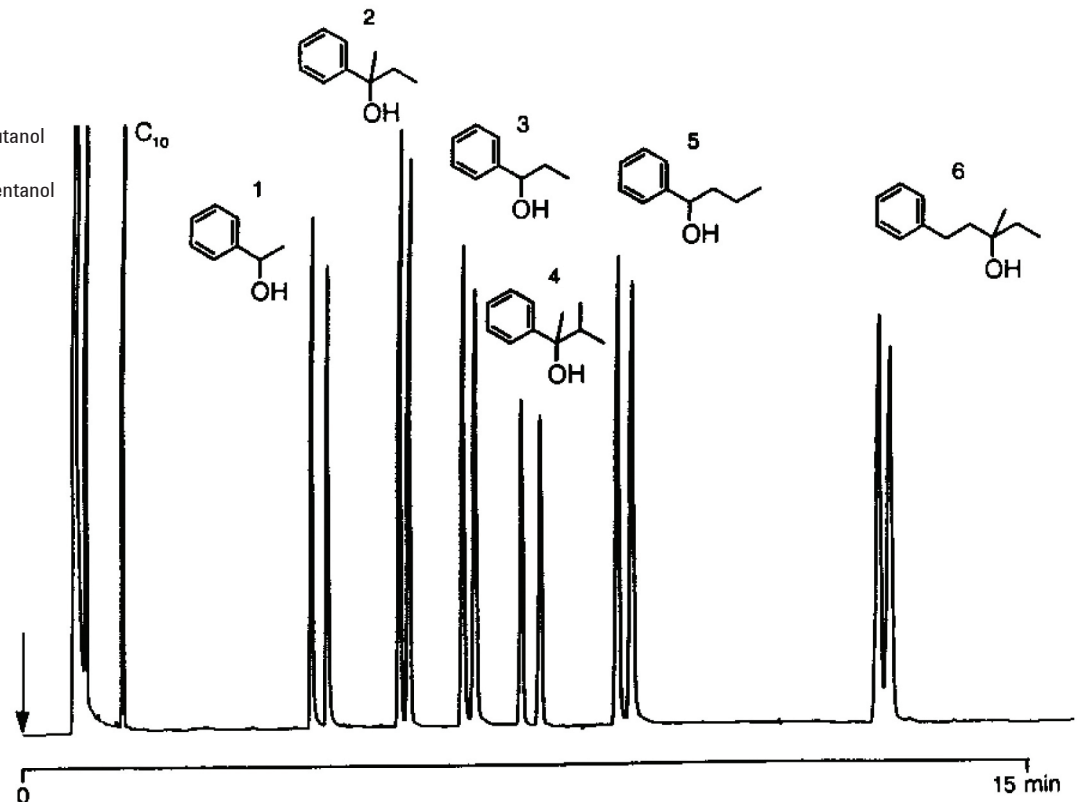
Conditions

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	: 100 °C → 130 °C, 2 °C/min
Carrier Gas	: H_2, 100 kPa (1 bar, 14.5 psi)
Injector	: Split
Detector	: FID
Courtesy	: Prof. V Schurig, Universität Tübingen, Tübingen, Germany

Peak identification

1. (±)-α-methylbenzyl alcohol
2. (±)-2-phenyl-2-butanol
3. (±)-1-phenyl-1-propanol
4. (±)-2-phenyl-3-methyl-2-butanol
5. (±)-1-phenyl-1-butanol
6. (±)-3-methyl-5-phenyl-3-pentanol



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