Enantiomers

Analysis of aromatic alcohols

Application Note

Environmental

Authors

Agilent Technologies, Inc.

Introduction

Gas chromatography with an Agilent CP-Chirasil-DEX CB column separates enantiomers of phenyl-3-butanol in 20 minutes.

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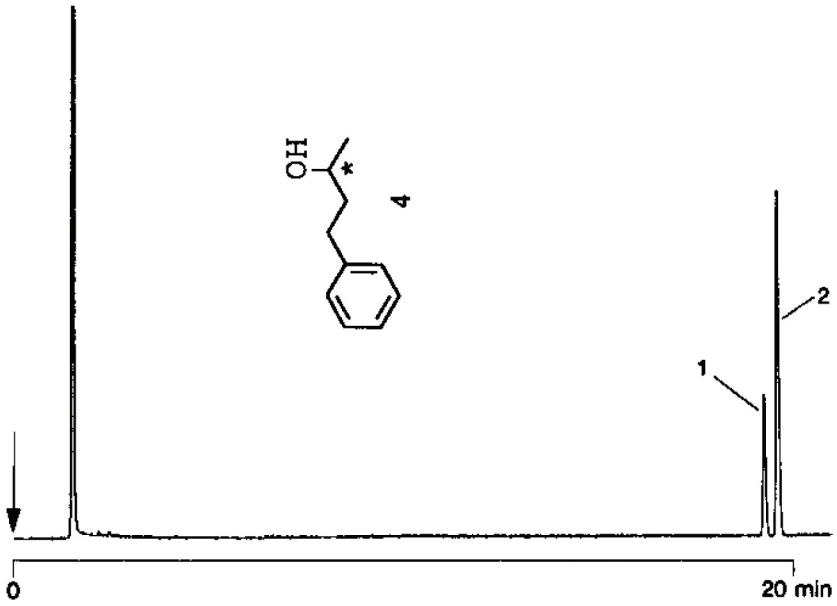
Conditions

Technique	:	GC-capillary
Column	:	Agilent CP-Chirasil-DEX CB, 0.32 mm x 25 m fused silica WCOT CP-Chirasil-DEX (df = 0.32 µm) (Part no. CP7503)
Temperature	:	120 °C
Carrier Gas	:	H_2, 27 kPa (0.27 bar, 4 psi)
Injector	:	Split, 100 mL/min T = 300 °C
Detector	:	FID T = 270 °C
Sample Size	:	2 µL
Concentration Range	:	0.2% of each isomer and compound
Solvent Sample	:	diethyl ether
Courtesy	:	Inger Cathrine Tveit, Hilde Oppedal and Dr. Anne Fiksdahl, Department of Organic Chemistry, University of Trondheim-NTH, Trondheim, Norway

Peak identification

1. S-1-phenyl-3-butanol
2. R-1-phenyl-3-butanol



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Printed in the USA
31 October, 2011
First published prior to 11 May, 2010
A00996

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