Alcohols $C_1 - C_3$

Separation of alcohols on a wide-bore fused silica column

Application Note

Materials Testing & Research

Authors

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Introduction

Gas chromatography using an Agilent CP-Sil 5 CB column separates 17 C_1 to C_3 alcohols in five minutes.

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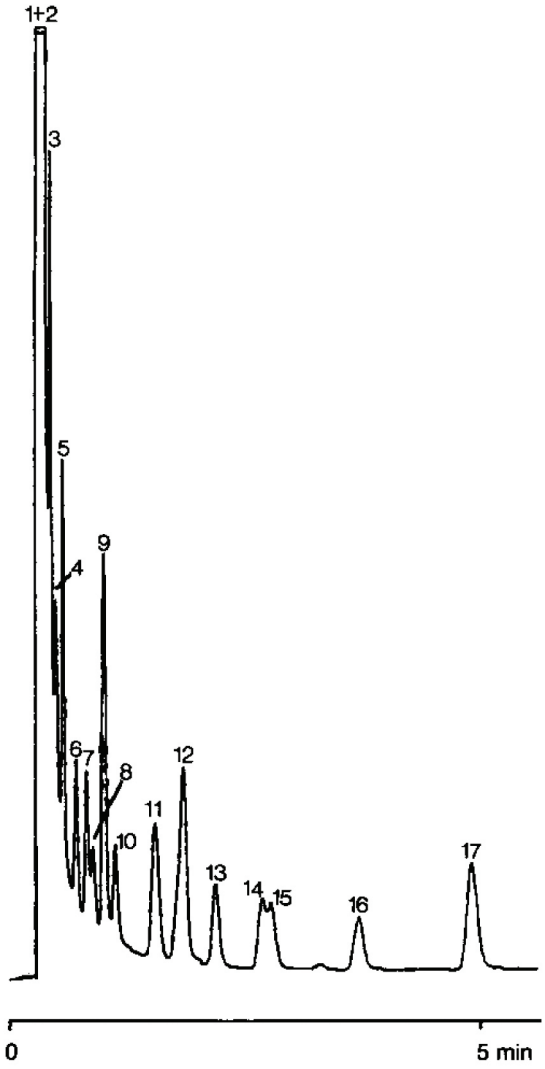
Conditions

Technique	: GC-capillary
Column	: Agilent CP-Sil 5 CB, 0.53 mm x 10 m fused silica WCOT CP-Sil 5 CB (5.0 µm) (Part no. CP7645)
Temperature	: 80 °C → 250 °C, 10 °C/min
Carrier Gas	: N_2, 10 kPa (0.1 bar), 52 cm/s
Injector	: direct T = 250 °C
Detector	: FID, 100 x 10^{-12} Afs T = 275 °C
Sample Size	: 0.2 µL

Peak identification

1. methanol
2. ethanol
3. isopropanol
4. tert. butanol
5. n-propanol
6. sec. butanol
7. isobutanol
8. 2-methyl-2-butanol
9. n-butanol
10. 3-methyl-2-butanol
11. 2-methyl-1 butanol + 3 methyl-1-butanol
12. n-pentanol + 4-methyl-2-pentanol
13. 3-hexanol
14. 2-methyl-1-pentanol
15. 2-ethyl-1-butanol
16. 2-heptanol
17. 1-heptanol



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Printed in the USA
31 October, 2011
First published prior to 11 May,, 2010
A00009

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