



## Aldehydes $C_3 - C_6$

Separation of alcohols on a wide-bore fused silica column

### Application Note

Materials Testing & Research

#### Authors

Agilent Technologies, Inc.

#### Introduction

Gas chromatography using an Agilent CP-Sil 5 CB column separates six  $C_3$  to  $C_6$  aldehydes in five minutes.



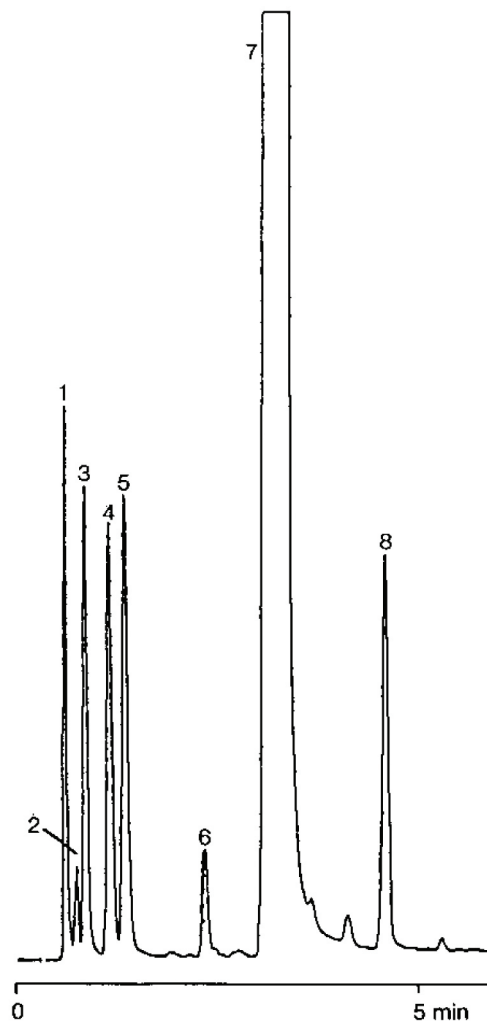
**Agilent Technologies**

## 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  $\mu$ m) (Part no. CP7645)  
Temperature : 50 °C  $\rightarrow$  200 °C, 10 °C/min  
Carrier Gas : N<sub>2</sub>, 10 kPa (0.1 bar), 52 cm/s  
Injector : direct  
T = 250 °C  
Detector : FID, 100 x 10<sup>-12</sup> Afs  
T = 275 °C  
Sample Size : 0.2  $\mu$ L  
Solvent Sample : tetrachloroethene (perchloroethylene)

## Peak identification

1. acetaldehyde
2. ethanol
3. propionaldehyde
4. isobutyraldehyde
5. butyraldehyde
6. acetal (1,1-diethoxyethane)
7. tetrachloroethene
8. benzaldehyde



[www.agilent.com/chem](http://www.agilent.com/chem)

This information is subject to change without notice.

© Agilent Technologies, Inc. 2011

Printed in the USA

31 October, 2011

First published prior to 11 May, 2010

A00011



**Agilent Technologies**