



Volatile fatty acids $C_2 - C_7$

Separation of $C_2 - C_7$ fatty acids in water

Application Note

Materials Testing & Research

Authors

Agilent Technologies, Inc.

Introduction

Gas chromatography with an Agilent CP-Sil 5 CB column separates nine C_2 to C_7 volatile fatty acids in water in 12 minutes.



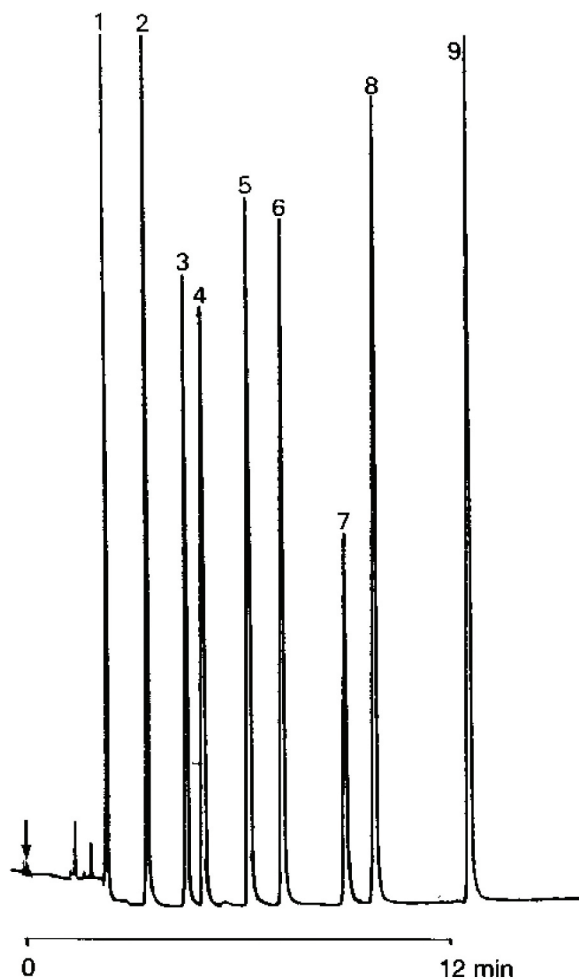
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Conditions

Technique : GC-capillary
Column : Agilent CP-Sil 5 CB, 0.32 mm x 25 m fused silica
WCOT CP-Sil 5 CB (5.0 μ m) (Part no. CP7680)
Temperature : 70 °C $\rightarrow$ 300 °C, 10 °C/min
Carrier Gas : He, 35 kPa (0.35 bar, 5.1 psi), 28 cm/s
Injector : Splitter, 100 mL/min
T = 250 °C
Detector : FID, 16×10^{-12} Afs
T = 300 °C
Sample Size : 1 μ L
Solvent Sample : water

Peak identification

1. acetic acid
2. propionic acid
3. isobutyric acid
4. butyric acid
5. isovaleric acid
6. valeric acid
7. isocaproic acid
8. caproic acid
9. heptanoic acid



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