



PCBs

Analysis of regulation-relevant PCB in fats

Application Note

Food Testing & Agriculture

Authors

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Introduction

For the separation of PCB the Agilent CP-Sil 8 CB phase provides highest selectivity. This column is commonly used as the industry standard for PCB separations. A 0.25 mm x 50 m will generate > 200.000 theoretical plates for highest resolution between individual PCB isomers. The seven regulation relevant PCBs (28, 52, 101, 118, 138, 153 and 180) are well resolved. A shorter, lower resolution column could also be used: see application notes 1542 and 1543.



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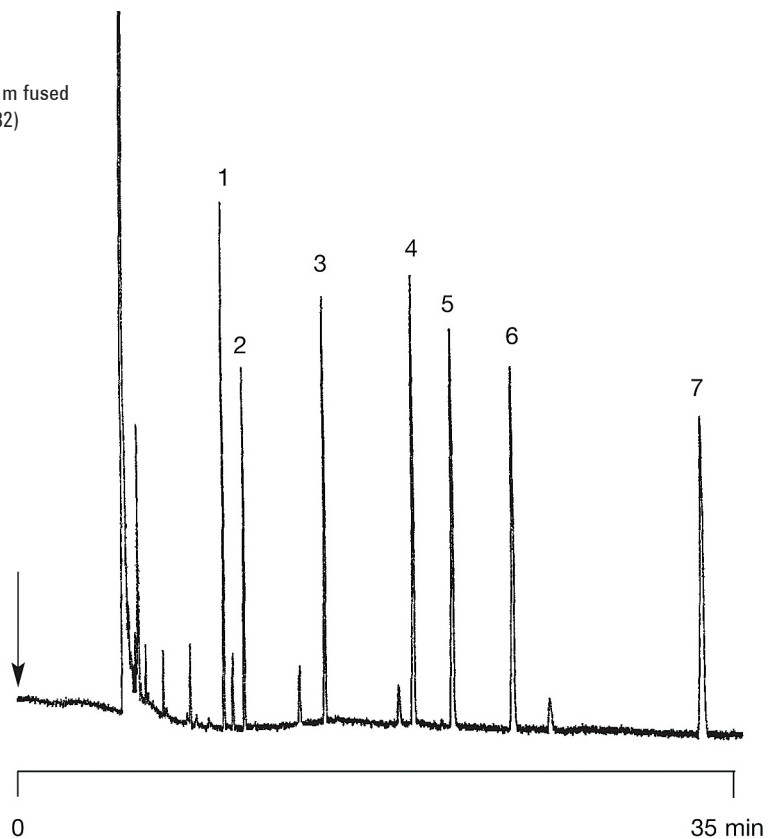
Conditions

Technique : GC-capillary/wide-bore
Column : Agilent CP-Sil 8 CB for PCBs, 0.25 mm x 50 m fused silica WCOT (df = 0.25 μ m) (Part no. CP7482)
Temperature : 235 $^{\circ}$ C
Carrier Gas : N₂, 125 kPa (1.25 bar, 20 psi)
Injector : Split, 30.8 mL/min,
T = 250 $^{\circ}$ C
Detector : ECD
T = 300 $^{\circ}$ C
Sample Size : 2.5 μ L
Concentration Range : 20 ppb

Courtesy : H. Schut, Technivet Ermelo BV, Ermelo,
The Netherlands

Peak identification

1. PCB 28
2. PCB 52
3. PCB 101
4. PCB 118
5. PCB 153
6. PCB 138
7. PCB 180



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This information is subject to change without notice.

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