Polycyclic aromatic hydrocarbons

Application Note

Environmental

Authors

Agilent Technologies, Inc.

Introduction

Gas chromatography with a custom-made Agilent CP-Sil 8 column separates 20 polycyclic aromatic hydrocarbons in 20 minutes.

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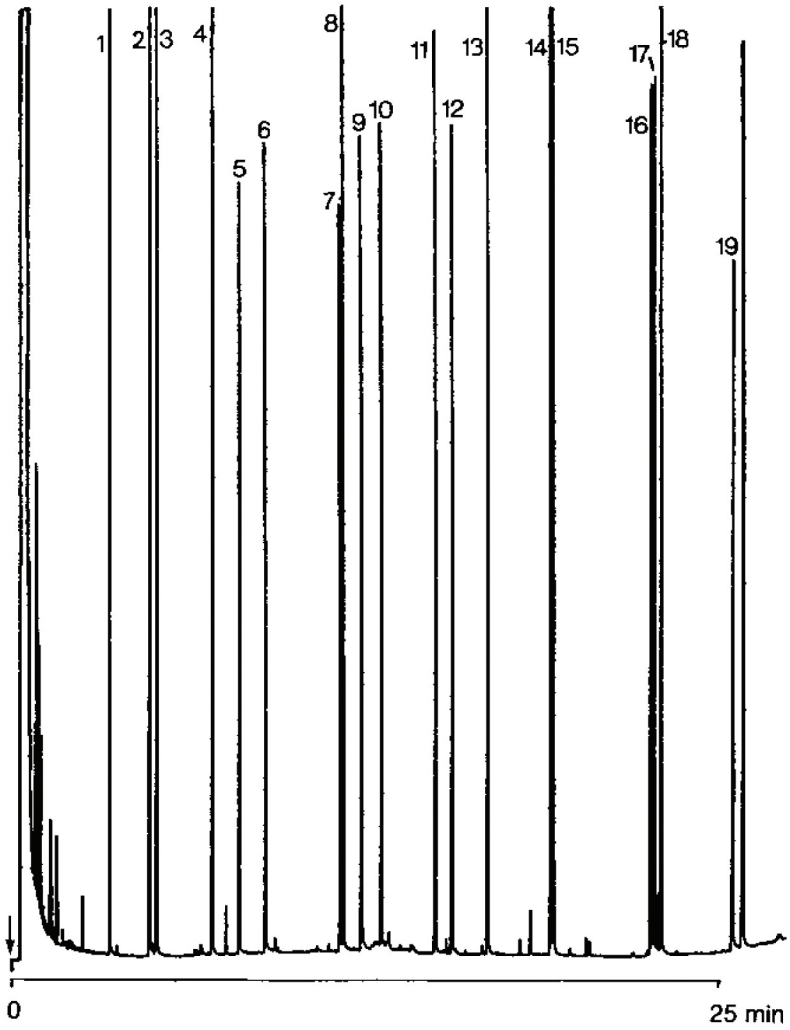
Conditions

Technique	: GC-capillary
Column	: Agilent CP-Sil 8, 0.32 mm x 25 m fused silica WCOT CP-Sil 8 (0.12 µm) (Part no. CP6030)
Temperature	: 65 °C → 325 °C, 6 °C/min
Carrier Gas	: H_2, 35 kPa (0.35 bar, 5.1 psi), 60 cm/s
Injector	: On-column
Detector	: FID, 8 x 10^{-12} Afs T = 325 °C
Sample Size	: 0.5 µL

Peak identification

1. naphthalene
2. 2-methylnaphthalene
3. 1-methylnaphthalene
4. acenaphthalene
5. dibenzofuran
6. fluorene
7. phenanthrene
8. anthracene
9. carbazole
10. 2-methylphenanthrene
11. fluoranthene
12. pyrene
13. 2,3-dibenzofluorene
14. benz (a) anthracene
15. chrysene
16. benz (e) pyrene
17. benz (a) pyrene
18. perylene
19. dibenzanthracene
20. benz (g,h,i) perylene



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