Polyaromatic hydrocarbons

Application Note

Environmental

Authors

Agilent Technologies, Inc.

Introduction

Fast separation of 16 polyaromatic hydrocarbons in 17 minutes via GC/MS using an Agilent FactorFour VF-35ms column.

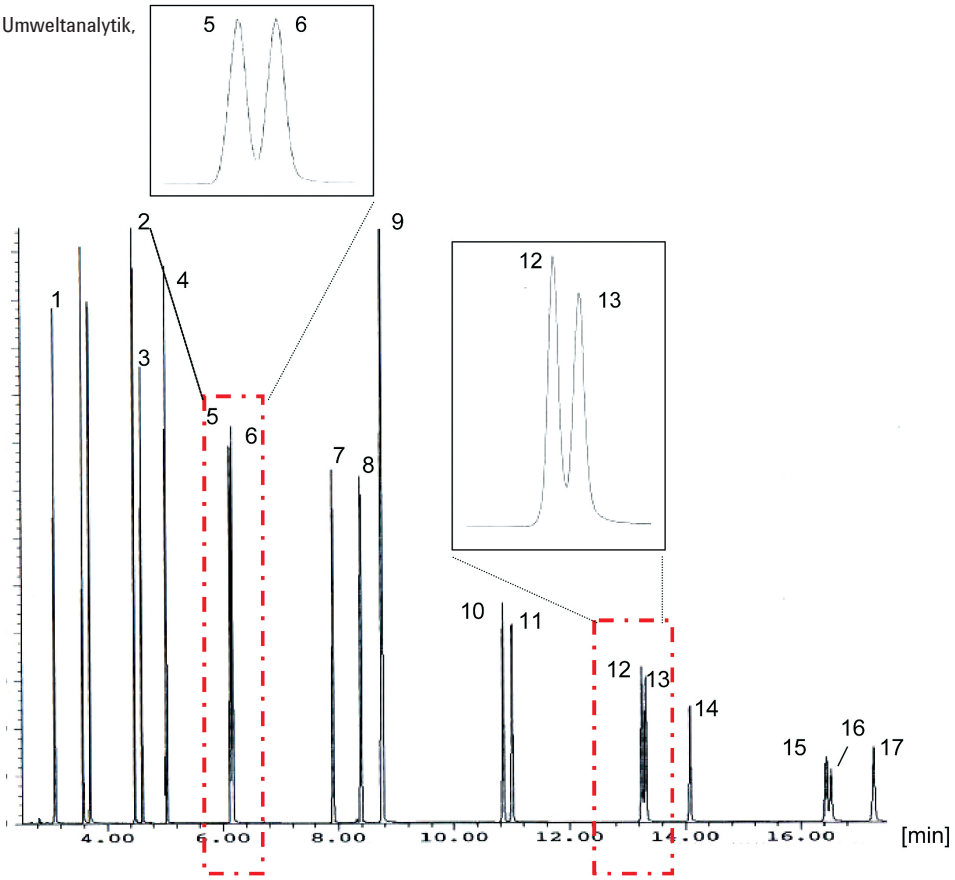
Agilent Technologies

Conditions

Technique	:	GC/MS
Column	:	Agilent FactorFour VF-35ms, 0.25 mm x 30 m fused silica (df = 0.1 µm) (Part no. CP8875)
Temperature	:	70 °C (0.5 min) ⟶ 240 °C, 30 °C/min ⟶ 300 °C, 10 °C/min (2.7 min)
Carrier Gas	:	Helium, 200 kPa
Injector	:	Splitless, after 0.5 min. split 1:20, T : 280 °C
InjectionVolume	:	1.5 µL
Detector	:	MS, TIC
Sample	:	ca. 10 ppm (w/v) in acetone/cyclohexane
Courtesy	:	Dietmar Vetter, Fader Umweltanalytik, Karlsruhe, Germany

Peak identification

1. naphthalene
2. acenaphthylene
3. acenaphthene
4. fluorene
5. phenanthrene
6. anthracene
7. fluoranthene
8. pyrene
9. IS (9,10-dichloroanthracene)
10. benz[a]anthracene
11. chrysene
12. benzo[b]fluoranthene
13. benzo[k]fluoranthene
14. benzo[a]pyrene
15. indeno[1,2,3-c,d]pyrene
16. dibenzo[a,h]anthracene
17. benzo[g,h,i]perylene



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
A02410

Agilent Technologies