

Polycyclic aromatic hydrocarbons

Experimental

Column: SVEA C18 Gold, 5 µm 110 Å 4.6 x 250 mm
Instrument: HPLC
Mobile phase: A: Acetonitrile B: H2O
 Gradient: 0-7 min 26% B; 7-17 min 1%B; 17-21 min 1%B;
 21-23 min 26%B; 23-30 min 23%B

Flow rate: 1.0 ml/min

Injection volume: 10 µl

Sample concentration: 10 µg/ml

Column temperature: 35 °C

Detector: UV 237 nm

Sample:	Name	Retention time (min)
1.	Naphthalene	7.070
2.	Acenaphthene	9.855
3.	Fluorene	10.283
4.	Phenanthrene	10.928
5.	Anthracene	11.843
6.	Fluoranthene	13.483
7.	Pyrene	14.614
8.	Chrysene	16.628
9.	Benzo(b)fluoranthene	18.921
10.	Benzo(k)fluoranthene	19.246
11.	Benzo(a)pyrene	20.062
12.	Dibenzo(a,h)anthracene,	20.629
13.	Indeno(1,2,3-cd)pyrene	22.024
14.	Benzo(g,h,i)perylene	22.341

Gradient

Time (min)	A: Acetonitrile (%)	B: H ₂ O (%)
0.0	74	26
7.0	74	26
17.0	99	1
21.0	99	1
23.0	74	26
30.0	77	23

Fluorescence detector

Wavelength switching time (min)	Excitation wavelength (nm)	Emission wavelength (nm)
0.00	270	324
11.50	375	248
13.00	462	280
16.00	385	270
20.00	410	292
24.00	507	274

