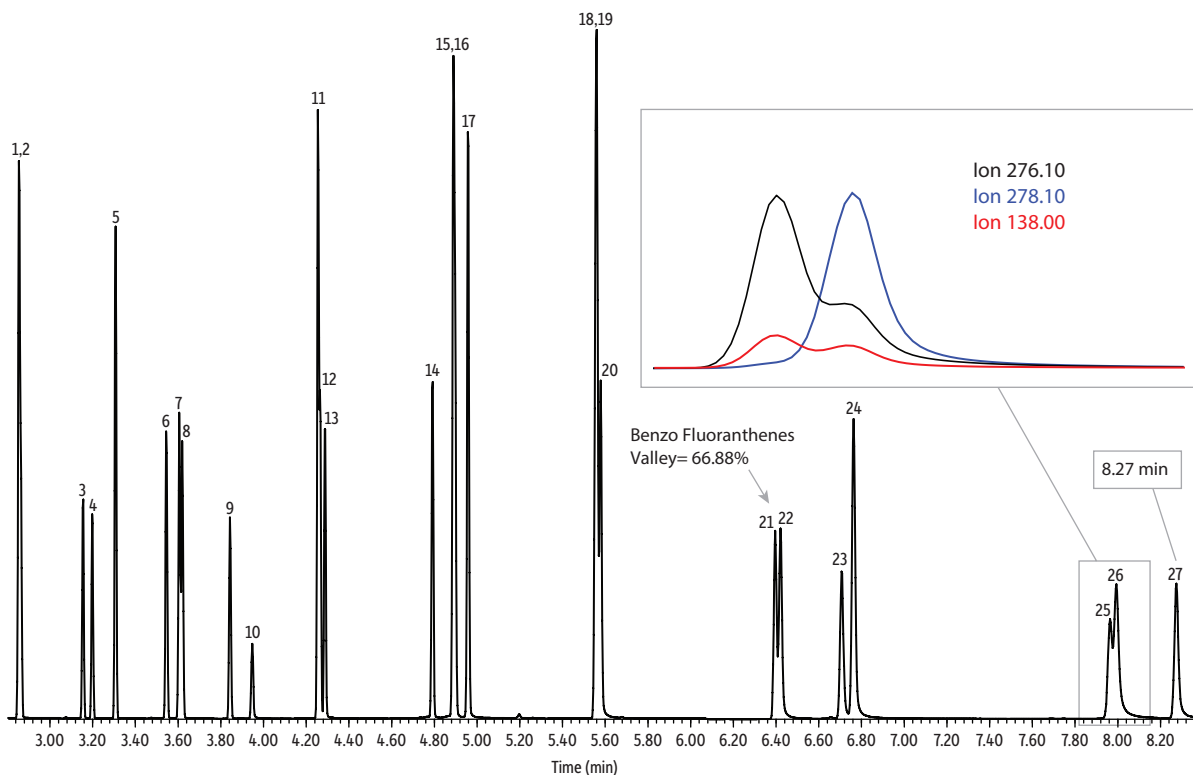


16 Priority PAHs and Methylnaphthalenes on Rxi- 5Sil MS using the GC Accelerator Kit in a 208 V Oven



GC_EV1448

Peaks	tR (min)	Conc. (µg/mL)
1. Naphthalene-d8 (IS)	2.86	2.0
2. Naphthalene	2.87	1.0
3. 2-Methylnaphthalene	3.16	1.0
4. 1-Methylnaphthalene	3.20	1.0
5. 2-Fluorobiphenyl (SS)	3.31	2.0
6. Acenaphthylene	3.55	1.0
7. Acenaphthene-d10 (IS)	3.61	2.0
8. Acenaphthene	3.62	1.0
9. Fluorene	3.84	1.0
10. 2,4,6-Tribromophenol (SS)	3.95	2.0
11. Phenanthrene-d10 (IS)	4.26	2.0
12. Phenanthrene	4.27	1.0
13. Anthracene	4.29	1.0
14. Fluoranthene	4.79	1.0
15. Pyrene-d10 (SS)	4.89	2.0
16. Pyrene	4.90	1.0
17. p-Terphenyl-d14 (SS)	4.96	2.0
18. Benz[a]anthracene	5.55	1.0
19. Chrysene-d12 (IS)	5.56	2.0
20. Chrysene	5.58	1.0
21. Benzo[b]fluoranthene	6.40	1.0
22. Benzo[k]fluoranthene	6.42	1.0
23. Benzo[a]pyrene	6.71	1.0
24. Perylene-d12 (IS)	6.76	2.0
25. Indeno[1,2,3-cd]pyrene	7.96	1.0
26. Dibenzo[a,h]anthracene	7.99	1.0
27. Benzo[ghi]perylene	8.27	1.0

Column Rxi-5Sil MS, 20 m, 0.15 mm ID, 0.15 µm (cat.# 43816)
Sample EPA Method 8310 PAH mixture (cat.# 31874)
 Revised SV internal standard mix (cat.# 31886)
 Revised B/N surrogate mix (cat.# 31888)
 Acid surrogate mix (4/89 SOW) (cat.# 31063)
 Dichloromethane

Diluent:
Injection
 Inj. Vol.: 1.0 µL split (split ratio 20:1)
 Liner: Topaz 4 mm single taper w/wool (cat.# 23303)
 Inj. Temp.: 275 °C

Oven
 Oven Temp.: 45 °C (hold 0.5 min) to 285 °C at 56.5 °C/min to 305 °C at 6 °C/min to 320 °C at 60.5 °C/min (hold 2.5 min)

Carrier Gas
 He, constant flow

Flow Rate:
 1.0 mL/min

Detector
 MS

Mode:
 SIM

SIM Program:

Group	Start Time (min)	Ion(s) (m/z)	Dwell (ms)
1	2.75	102, 108, 128, 136	15
2	3.04	85, 115, 142.1, 172.1	10
3	3.45	76, 82, 152.1, 153.1, 164.1	15
4	3.76	82.40, 142.90, 166.1, 329.8	25
5	4.13	89, 94, 178.1, 188.1	10
6	4.58	101, 106.1, 122.1, 202.1, 212.1, 244.1	10
7	5.31	101, 120.1, 226.1, 228.1, 240.2	5
8	6.06	126, 252.1	25
9	6.59	126, 132.1, 252.1, 264.2	25
10	7.49	138, 139, 276.1, 278.1	25

Transfer Line Temp.: 280 °C
Analyzer Type: Quadrupole
Source Type: Extractor
Extractor Lens: 9 mm ID
Source Temp.: 330 °C
Quad Temp.: 180 °C
Solvent Delay Time: 1 min
Tune Type: DFTPP
Ionization Mode: EI
Instrument
 Agilent 7890B GC & 5977A MSD

Notes
 Fast SIM analysis of 16 priority PAHs plus the methylnaphthalenes in a 208 V fast ramping oven equipped with the GC Accelerator kit (cat.# 23849) (injected 1 µg/mL = 0.05 ng on column).