

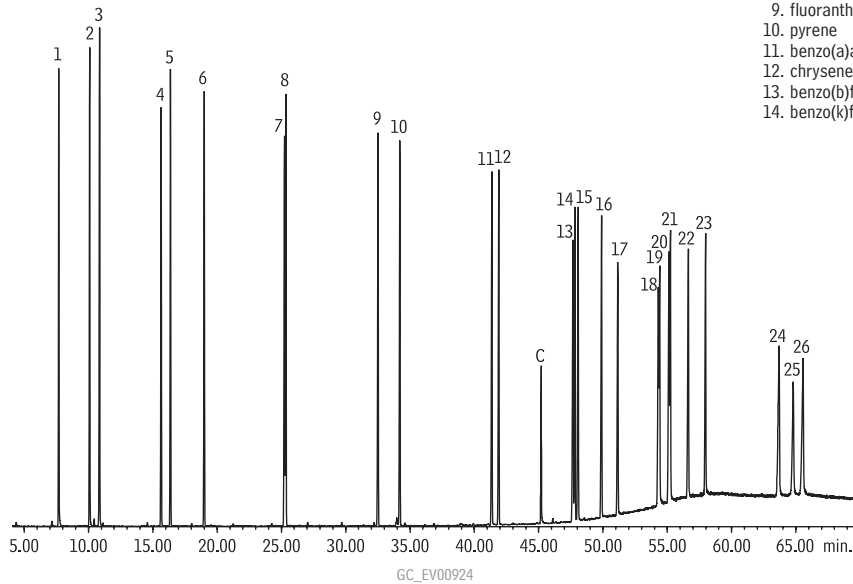
Polycyclic Aromatic Hydrocarbons

Rxi®-17

new!

- maximum resolution
- benzo(j)fluoranthene resolved

Rxi® Technology!



Peak List	Ret. Time (min.)	Peak List	Ret. Time (min.)
1. naphthalene	7.70	15. benzo(j)fluoranthene	48.07
2. 1-methylnaphthalene	10.08	16. benzo(a)pyrene	49.89
3. 2-methylnaphthalene	10.85	17. 3-methylcholanthrene	51.15
4. acenaphthylene	15.64	18. dibenzo(a,h)acridine	54.30
5. acenaphthene	16.36	19. dibenzo(a,i)acridine	54.41
6. fluorene	19.00	20. indeno(1,2,3-cd)pyrene	55.13
7. phenanthrene	25.24	21. dibenzo(a,h)anthracene	55.24
8. anthracene	25.36	22. benzo(ghi)perylene	56.64
9. fluoranthene	32.50	23. 7H-dibenzo(c,g)carbazole	57.98
10. pyrene	34.21	24. dibenzo(a,e)pyrene	63.69
11. benzo(a)anthracene	41.37	25. dibenzo(a,i)pyrene	64.79
12. chrysene	41.91	26. dibenzo(a,h)pyrene	65.56
13. benzo(b)fluoranthene	47.67		
14. benzo(k)fluoranthene	47.82		

Column: Rxi®-17, 30m, 0.25mm ID, 0.25µm (cat.# 13523)
 Sample: PAH mix, 50µg/mL each component:
 EPA Method 610 Mix (cat.# 31011)
 PAH Supplement Mix (cat.# 31857)
 1-methylnaphthalene (cat.# 31283)
 2-methylnaphthalene (cat.# 31285)

Instrument: Agilent 6890
 Inj.: 1.0µL pulsed splitless injection (50ng each component on column), 4mm Drilled Uniliner® inlet liner with hole near top (cat.# 21055); pulse: 20psi @ 0.3 min., 40mL/min. @ 0.2 min.

Inj. temp.: 300°C
 Carrier gas: helium, constant flow
 Flow rate: 1.2mL/min.
 Oven temp.: 100°C (hold 0.5 min.) to 320°C @ 4°C/min. (hold 20 min.)

Det.: Agilent 5973 GC/MS
 Scan range: 50-550amu
 Solvent delay: 4.0 min.
 Tune: DFTPP
 Ionization: EI

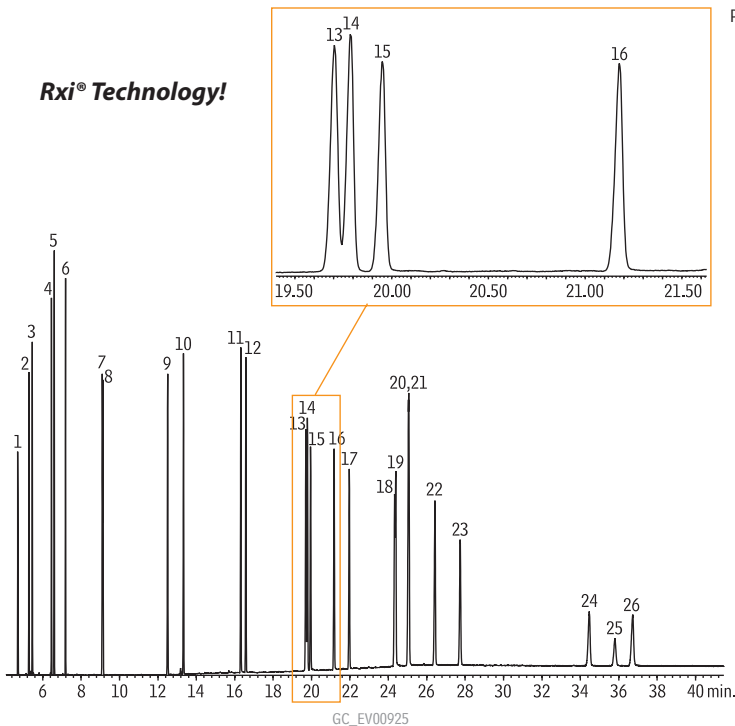
Polycyclic Aromatic Hydrocarbons

Rxi®-17

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Peak List	Ret. Time (min.)	Peak List	Ret. Time (min.)
1. naphthalene	4.70	14. benzo(k)fluoranthene	19.78
2. 1-methylnaphthalene	5.28	15. benzo(j)fluoranthene	19.95
3. 2-methylnaphthalene	5.46	16. benzo(a)pyrene	21.17
4. acenaphthylene	6.45	17. 3-methylcholanthrene	21.97
5. acenaphthene	6.60	18. dibenzo(a,h)acridine	24.33
6. fluorene	7.18	19. dibenzo(a,i)acridine	24.39
7. phenanthrene	9.10	20. indeno(1,2,3-cd)pyrene	25.04
8. anthracene	9.14	21. dibenzo(a,h)anthracene	25.07
9. fluoranthene	12.50	22. benzo(ghi)perylene	26.43
10. pyrene	13.33	23. 7H-dibenzo(c,g)carbazole	27.75
11. benzo(a)anthracene	16.32	24. dibenzo(a,e)pyrene	34.46
12. chrysene	16.58	25. dibenzo(a,i)pyrene	35.80
13. benzo(b)fluoranthene	19.70	26. dibenzo(a,h)pyrene	36.73

Column: Rxi®-17, 30m, 0.25mm ID, 0.25µm (cat.# 13523)
 Sample: PAH mix, 20µg/mL each component:
 EPA Method 610 Mix (cat.# 31011)
 PAH Supplement Mix (cat.# 31857)
 1-methylnaphthalene (cat.# 31283)
 2-methylnaphthalene (cat.# 31285)

Inj.: 1.0µL pulsed splitless injection (20ng each component on column), 4mm Drilled Uniliner® inlet liner with hole near top (cat.# 21055); pulse: 20psi @ 0.3 min., 40mL/min. @ 0.2 min.

Inj. temp.: 300°C
 Carrier gas: helium, constant flow
 Flow rate: 1.2mL/min.
 Oven temp.: 90°C (hold 1.0 min.) to 215°C @ 25°C/min. (hold 0.5 min.) to 235°C @ 4°C/min., to 280°C @ 15°C/min., to 320°C @ 4°C/min. (hold 20 min.)

Det.: Agilent 5973 GC/MS
 Scan range: 50-550amu
 Solvent delay: 4.0 min.
 Tune: DFTPP
 Ionization: EI