

Rxi®-PAH Columns (fused silica)

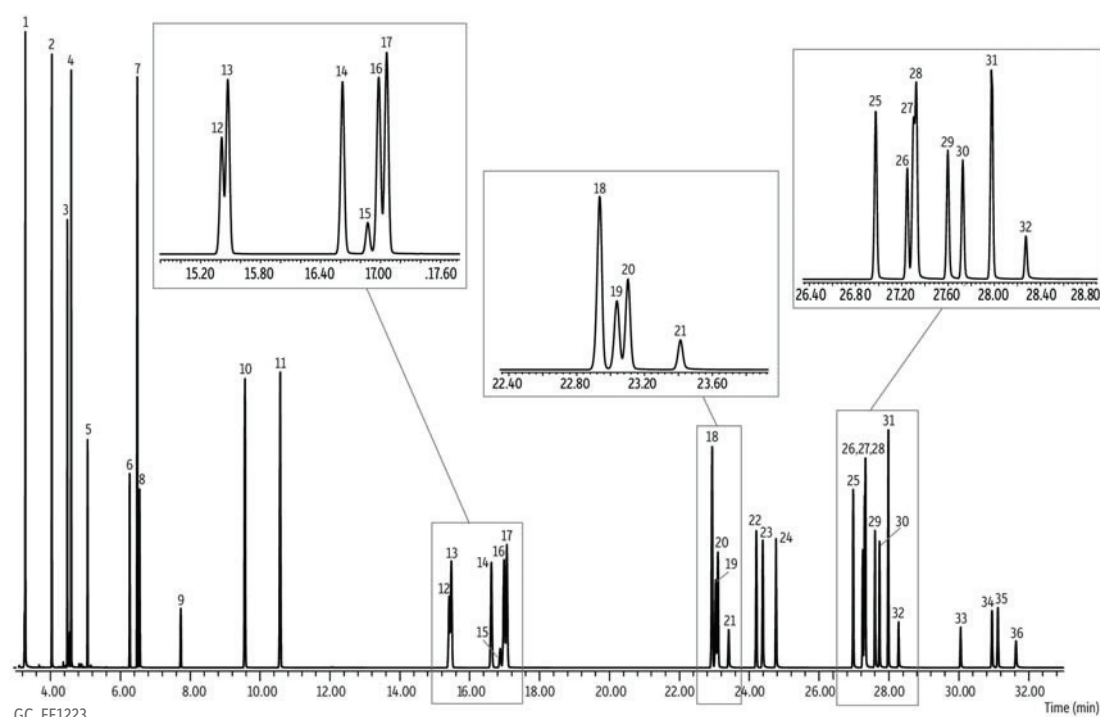
(midpolarity proprietary phase)

- Ideal for EFSA PAH4 analysis—separates all priority compounds: benz[a]anthracene, chrysene, benzo[b]fluoranthene, and benzo[a]pyrene.
- Best resolution of chrysene from interfering PAHs, triphenylene, and cyclopenta[cd]pyrene.
- Complete separation of benzo [b], [k], [j], and [a] fluoranthenes.
- 360 °C thermal stability allows analysis of low-volatility dibenzo pyrenes.



ID	df	temp. limits	30-Meter cat.#	40-Meter cat.#	60-Meter cat.#
0.18 mm	0.07 µm	to 360 °C		49316	
0.25 mm	0.10 µm	to 360 °C	49318		49317

NIST SRM 2260a PAH Mix on Rxi®-PAH



- Peaks**
1. Naphthalene
 2. Biphenyl
 3. Acenaphthylene
 4. Acenaphthene
 5. Fluorene
 6. Dibenzothiophene
 7. Phenanthrene
 8. Anthracene
 9. 4H-Cyclopenta[def]phenanthrene
 10. Fluoranthene
 11. Pyrene
 12. Benzo[ghi]fluoranthene
 13. Benzo[c]phenanthrene
 14. Benzo[a]anthracene
 15. Cyclopenta[cd]pyrene
 16. Triphenylene
 17. Chrysene
 18. Benzo[b]fluoranthene
 19. Benzo[k]fluoranthene
 20. Benzo[j]fluoranthene
 21. Benzo[a]fluoranthene
 22. Benzo[e]pyrene
 23. Benzo[a]pyrene
 24. Perylene
 25. Dibenz[a,j]anthracene
 26. Dibenz[a,c]anthracene
 27. Indeno[1,2,3-cd]pyrene
 28. Dibenz[a,h]anthracene
 29. Benzo[b]chrysene
 30. Picene
 31. Benzo[ghi]perylene
 32. Anthanthrene
 33. Dibenzo[b,k]fluoranthene
 34. Dibenzo[a,e]pyrene
 35. Coronene
 36. Dibenzo[a,h]pyrene

Column Rxi®-PAH, 40 m, 0.18 mm ID, 0.07 µm (cat.# 49316)
Sample NIST SRM 2260a PAH mix
Diluent: Toluene
Conc.: 0.2 - 2 µg/mL (SRM 2260a PAH mix was diluted 5x in toluene)
Injection
 Inj. Vol.: 0.5 µL pulsed splitless (hold 0.58 min)
 Liner: Sky® 2 mm single taper w/wool (cat.# 23316.1)
 Inj. Temp.: 275 °C
 Pulse Pressure: 80 psi (551.6 kPa)
 Pulse Time: 0.6 min
 Purge Flow: 40 mL/min
Oven
 Oven Temp.: 110 °C (hold 1 min) to 210 °C at 37 °C/min to 260 °C at 3 °C/min to 350 °C at 11 °C/min (hold 4.5 min)
Carrier Gas
 Flow Rate: He, constant flow 1.4 mL/min

Detector MS
Mode: SIM
SIM Program:

Group	Start Time (min)	Ion(s) (m/z)	Dwell (ms)
1	3.00	128, 152, 153, 154, 165	40
2	5.50	178, 184, 190, 202	50
3	13.00	226, 228	100
4	20.00	252	200
5	26.00	276, 278	100
6	29.00	300, 302	150

Transfer Line Temp.: 350 °C
 Analyzer Type: Quadrupole
 Source Temp.: 350 °C
 Quad Temp.: 200 °C
 Solvent Delay Time: 3.00 min
 Tune Type: PFTBA
 Ionization Mode: EI
Instrument Agilent 7890A GC & 5975C MSD