Rxi®-XLB Columns (fused silica)

(low-polarity proprietary phase)

- General-purpose columns exhibiting extremely low bleed. Ideal for many GC-MS applications, including pesticides, PCB congeners (e.g., Aroclor mixes), PAHs.
- Unique selectivity.
- Temperature range: 30 °C to 360 °C.

Improvements in polymer synthesis and tubing deactivation enable us to make inert, stable Rxi®-XLB columns especially well-suited for analyzing active, high molecular weight compounds with sensitive GC-MS systems, including ion trap detectors. Excellent efficiency, coupled with inertness, low bleed, and high thermal stability, make Rxi®-XLB columns ideal for analyzing semivolatile compounds in drinking water.

ID	df	temp. limits*	15-Meter cat.#	30-Meter cat.#	60-Meter cat.#
0.25 mm	0.10 µm	30 to 340/360 °C	13705	13708	
	0.25 µm	30 to 340/360 °C	13720	13723	13726
	0.50 µm	30 to 340/360 °C		13738	
	1.00 µm	30 to 340/360 °C		13753	
0.32 mm	0.25 µm	30 to 340/360 °C		13724	13727
	0.50 µm	30 to 340/360 °C		13739	
	1.00 µm	30 to 340/360 °C		13754	
0.53 mm	0.50 µm	30 to 320/360 °C		13740	

ID	df	temp. limits	20-Meter cat.#
0.18 mm	0.18 µm	30 to 340/360 °C	43702

*Maximum temperatures listed are for shorter length columns. Longer columns may have a different maximum temperature.

similar phases

DB-XLB, VF-Xms, MR1, ZB-XLB

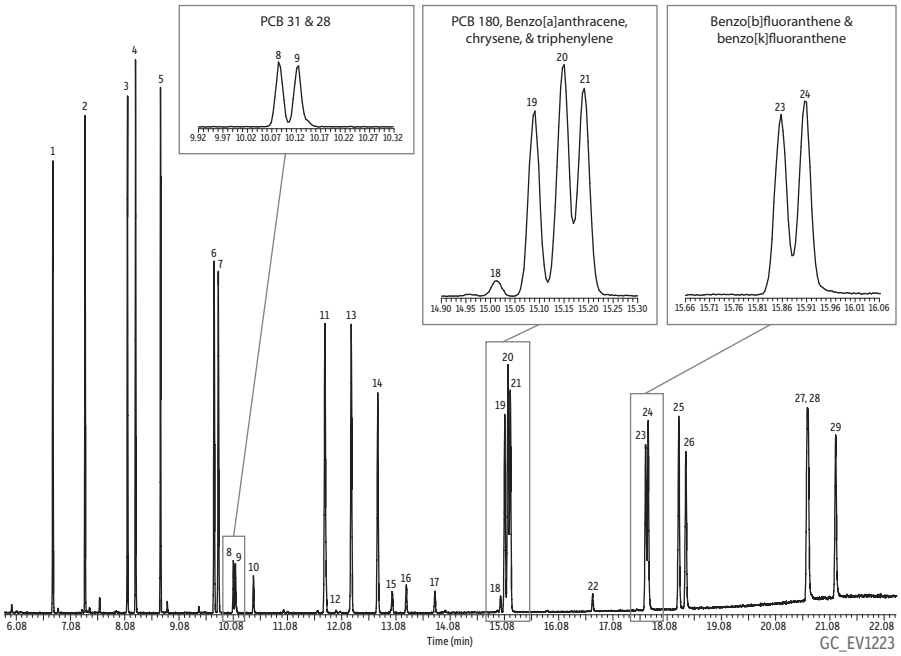
tech tip

Rxi®-XLB columns for Method 525

In combination with an Rxi®-XLB column, simple adjustments to the injection conditions can greatly improve sensitivity for active and high molecular weight Method 525 target compounds.

By eliminating contact between the sample and the hot metal surfaces in the injection port, a drilled Uniliner® inlet liner prevents analytes from degrading in the injection port.

PAHs and PCB Congeners on Rxi®-XLB



Peaks	Conc. (µg/mL)
1. Naphthalene	5
2. 2-Methylnaphthalene	5
3. Acenaphthylene	5
4. Acenaphthene	5
5. Fluorene	5
6. Phenanthrene	5
7. Anthracene	5
8. PCB 31	1
9. PCB 28	1
10. PCB 52	1
11. Fluoranthene	5
12. PCB 101	1
13. Pyrene	5
14. 2-Methylfluoranthene	5
15. PCB 118	1
16. PCB 153	1
17. PCB 138	1
18. PCB 180	1
19. Benzo[a]anthracene	5
20. Chrysene	5
21. Triphenylene	5
22. PCB 194	1
23. Benzo[b]fluoranthene	5
24. Benzo[k]fluoranthene	5
25. Benzo[e]pyrene	5
26. Benzo[a]pyrene	5
27. Dibenzo[a,h]anthracene	5
28. Indeno[1,2,3-cd]pyrene	5
29. Benzo[g,h,i]perylene	5

Column Rxi®-XLB, 30 m, 0.25 mm ID, 0.25 µm (cat.# 13723)
Sample SV calibration mix #5 / 610 PAH mix (cat.# 31011)
Benzo(e)pyrene (cat.# custom)
Triphenylene (cat.# custom)
2-Methylnaphthalene (cat.# 31285)
2-Methylfluoranthene (cat.# custom)
PCB congener standard #2 (cat.# 32294)
PCB 31 (cat.# custom)
Diluent: Dichloromethane
Injection
Inj. Vol.: 0.5 µL splitless (hold 1.75 min)
Liner: 2.0 mm ID straight inlet liner w/wool (cat.# 21718)
Inj. Temp.: 300 °C
Purge Flow: 50 mL/min
Oven
Oven Temp.: 40 °C (hold 2 min) to 240 °C at 30 °C/min (hold 2 min) to 340 °C at 10 °C/min (hold 5 min)
Carrier Gas He, constant flow
Flow Rate: 1 mL/min
Detector MS
Mode: Scan
Transfer Line Temp.: 300 °C
Analyzer Type: Quadrupole
Source Temp.: 280 °C
Electron Energy: 70 eV
Solvent Delay Time: 4 min
Tune Type: manual
Ionization Mode: EI
Scan Range: 45-550 amu
Scan Rate: 5 scans/sec
Instrument PE Clarus 500 GC & Clarus 500 MS