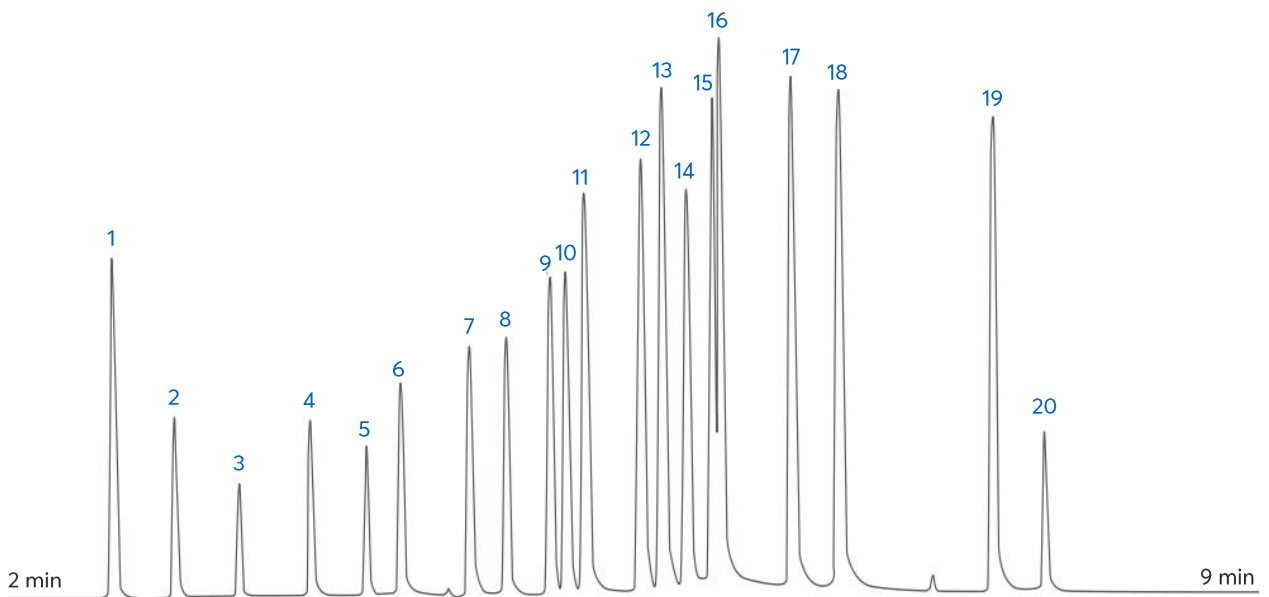


# Application note # C-13091

## Fast Separation of PCBs using a 10 m Avantor® Hichrom HI-5 (EPA Method 8082)



**Figure 1:** Fast separation of PCBs using a 10 m narrow-bore Avantor® Hichrom HI-5 column.

# Method Details

## CONDITIONS

Oven Program:	120 °C, 25 °C/min, 200 °C, 20 °C/min, 300 °C
Carrier Gas:	Helium, 0.5 mL/min
Injector:	PTV injector, 50 °C, 600 °C/min, 320 °C (2 min), 0.5 µL injection volume, 1:50 split ratio
Detector:	ECD, 320 °C, 300 Hz acquisition rate

*Always check the latest and official method information from the EPA prior to analysis.*

The HI-5 is a versatile general-purpose column with a low-polarity stationary phase with a 5% phenyl, 95% methyl polysiloxane composition. It is well suited to a variety of applications including pesticides, essential oils, PCBs, semi-volatiles, solvent impurities, phenols and many more.

## PEAK IDENTIFICATION

- |                                     |  |
|-------------------------------------|--|
| 1. 2,4,5,6-tetrachloro-m-xylene     | 11. 2,2',3,5,5',6-hexachlorobiphenyl         |
| 2. 2,3-dichlorobiphenyl             | 12. 2,2',4,4',5,5'-hexachlorobiphenyl        |
| 3. 2,2',5'-trichlorobiphenyl        | 13. 2,2',3,4,5,5'-hexachlorobiphenyl         |
| 4. 2,4,5-trichlorobiphenyl          | 14. 2,2',3,4,4',5'-hexachlorobiphenyl        |
| 5. 2,2',5,5'-tetrachlorobiphenyl    | 15. 2,2',3,4',5,5',6-heptachlorobiphenyl     |
| 6. 2,2',3,5'-tetrachlorobiphenyl    | 16. 2,2',3,4,4',5',6-heptachlorobiphenyl     |
| 7. 2,3',4,4'-tetrachlorobiphenyl    | 17. 2,2',3,4,4',5,5'-heptachlorobiphenyl     |
| 8. 2,2',4,5,5'-pentachlorobiphenyl  | 18. 2,2',3,3',4,4',5-heptachlorobiphenyl     |
| 9. 2,2',3,4,5'-pentachlorobiphenyl  | 19. 2,2',3,3',4,4',5,5',6-nonachlorobiphenyl |
| 10. 2,3,3',4',6-pentachlorobiphenyl | 20. Decachlorobiphenyl (I.S.)                |

## ORDERING TABLE

Product	Details	Dimensions	Part Number
Avantor® Hichrom HI-5	FAST GC Column	0.10 mm, 0.20 µm, 10 m	HI02-10-020-10