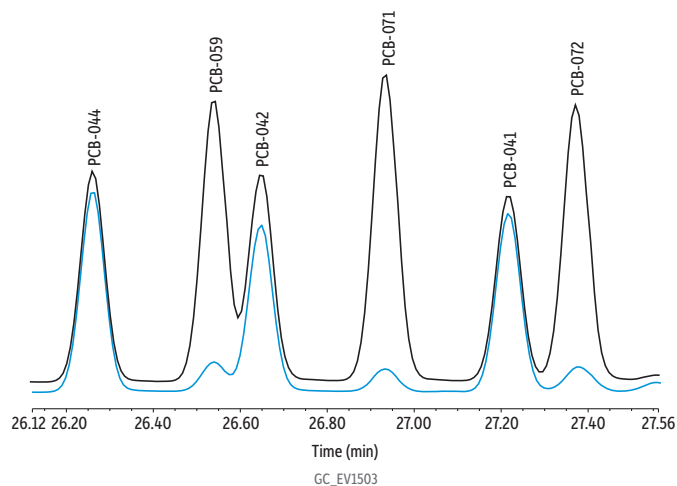


Tetrachlorobiphenyl Ion Comparison Demonstrating the Ortho Effect on Rtx-PCB

M+ → M-2Cl+ Transition (m/z 289.9→220)

M-Cl+ → M-2Cl+ Transition (m/z 255→220)



Column Rtx-PCB, 60 m, 0.18 mm ID, 0.18 µm (cat.# 41304)
Sample AccuGrand 209 PCB standard (cat.# PCB-209-AG)
Diluent: Isooctane
Injection
Inj. Vol.: 2 µL splitless (hold 0.75 min)
Liner: Topaz 4.0 mm ID single taper inlet liner w/ wool (cat.# 23303)
Inj. Temp.: 350 °C
Purge Flow: 100 mL/min
Oven
Oven Temp.: 120 °C (hold 1.1 min) to 188 °C at 20 °C/min to 260 °C at 2 °C/min to 300 °C at 6 °C/min to 320 °C at 10 °C/min (hold 6 min)
Carrier Gas He, constant flow
Flow Rate: 1.44 mL/min
Detector TSQ 9000 with AEI
Transfer
Line Temp.: 320 °C
Analyzer Type: Quadrupole
Source Type: AEI
Source Temp.: 350 °C
Solvent
Delay Time: 11.01 min
Tune Type: PFTBA
Ionization Mode: EI
Instrument Thermo Scientific TSQ 8000 Triple Quadrupole GC-MS