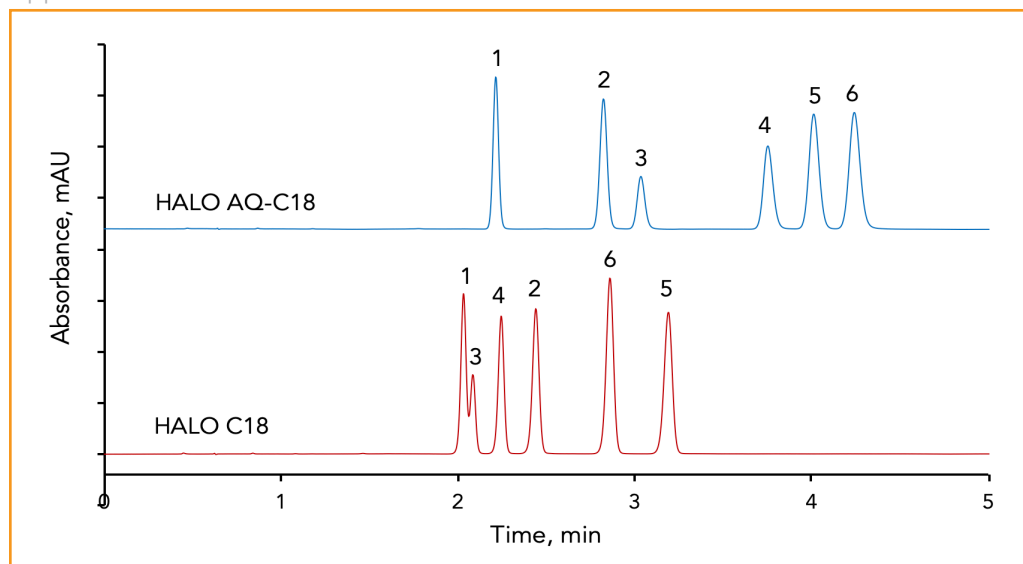




Separation of Polar Samples on HALO® AQ-C18 and C18

Application Note 157-G



PEAK IDENTITIES:

1. Cinnamyl alcohol
2. 4'-Bromoacetanilide
3. Nitrobenzene
4. Anisole
5. 3,4-Dinitrotoluene
6. 2,4-Dinitrotoluene

HALO® AQ-C18 and HALO® C18 phases have different selectivities as shown in the chromatograms above. The HALO® AQ-C18 phase delivers increased retention for polar molecules compared to C18.

TEST CONDITIONS:

Columns:

- 1) HALO 90 Å C18, 2.7 μm , 4.6 x 100 mm
Part Number: 92814-602
- 2) HALO 90 Å AQ-C18, 2.7 μm , 4.6 x 100 mm
Part Number: 92814-622

Mobile Phase: 48/52 - A/B

- A: Water
B: Methanol

Flow Rate: 1.4 mL/min

Pressure: 344 bar (C18)
329 bar (AQ-C18)

Temperature: 30 °C

Detection: UV 254 nm, VWD

Injection Volume: 0.5 μL

Sample Solvent: Methanol

Response Time: 0.02 sec

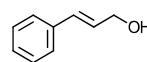
Data Rate: 25 Hz

Flow Cell: 2.5 μL semi-micro

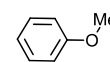
LC System: Shimadzu Prominence UFLC XR

Extra Column Volume: ~14 μL

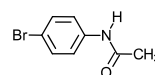
STRUCTURES:



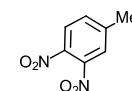
Cinnamyl alcohol



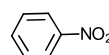
Anisole



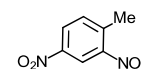
4'-Bromoacetanilide



3,4-Dinitrotoluene



Nitrobenzene



2,4-Dinitrotoluene

