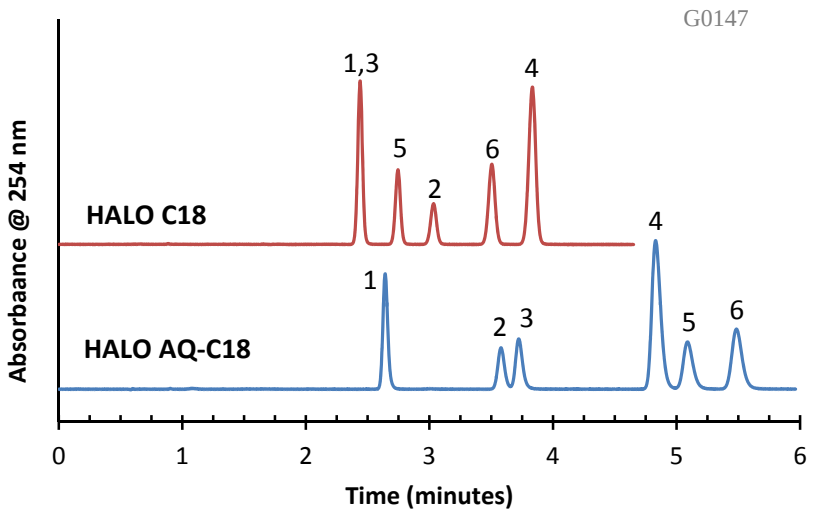
Application Note: 157-G

Separation of Polar Samples on HALO AQ-C18 and C18



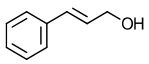
PEAK IDENTITIES:

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

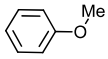
TEST CONDITIONS:

Columns: HALO C18, 4.6 x 100 mm, 2.7 µm
HALO AQ-C18, 4.6 x 100 mm, 2.7 µm
Part Numbers: 92814-602
92814-622
Mobile Phase: 48/52 (v:v): A/B
A = water
B = methanol
Flow Rate: 1.4 mL/min.
Pressure: HALO C18: 344 bar
HALO AQ-C18: 329 bar
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
ECV: ~14 µL

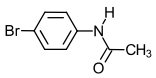
STRUCTURES:



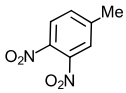
Cinnamyl alcohol



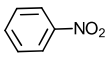
Anisole



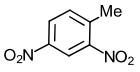
4'-Bromoacetanilide



3,4-Dinitrotoluene



Nitrobenzene



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.