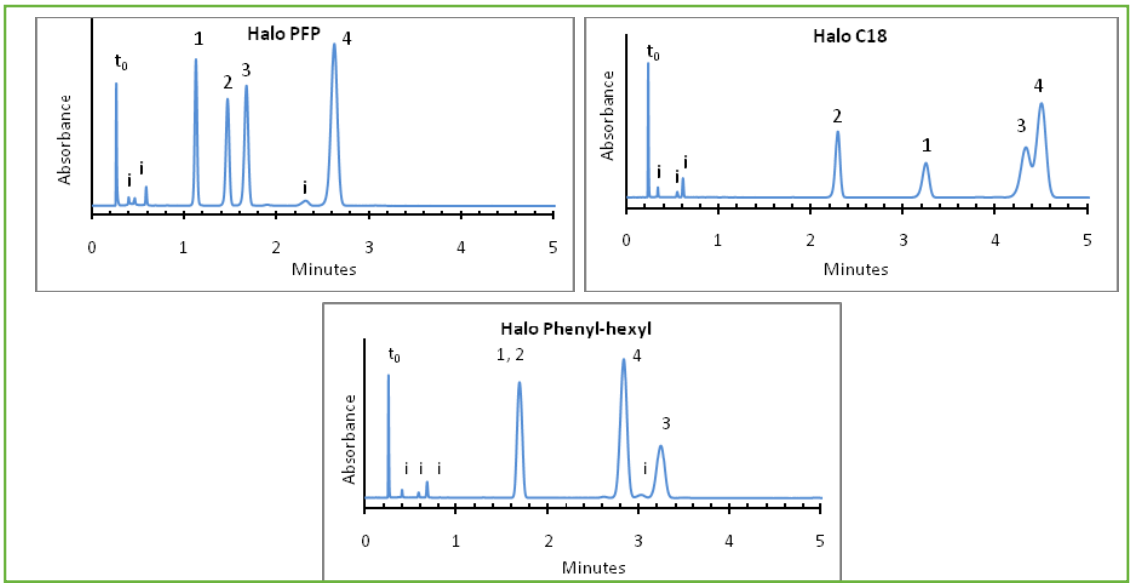
HALO®

ENVIRONMENTAL

Separation of Neutral Aromatics on HALO® PFP, C18 and Phenyl-Hexyl

Application Note 23-N



PEAK IDENTITIES:

1. Butylbenzene
2. Acenaphthene
3. 1-Phenylnaphthalene
4. Pyrene

i = impurities

The separation of nonpolar aromatic compounds on these three HALO® bonded phases under the same conditions show differences in selectivity that can be utilized in optimizing difficult separations.

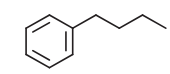
TEST CONDITIONS:

Columns:

1) HALO 90 Å PFP, 2.7 µm, 4.6 x 50 mm
   Part Number: 92814-409
2) HALO 90 Å C18, 2.7 µm, 4.6 x 50 mm
   Part Number: 92814-402
3) HALO 90 Å Phenyl-Hexyl, 2.7 µm, 4.6 x 50 mm
   Part Number: 92814-406

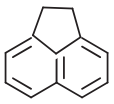
Mobile Phase: 30/70 - A/B
   A: Water
   B: Methanol
Flow Rate: 2.0 mL/min
Pressure: ~250 bar
Temperature: 40 °C
Detection: UV 254 nm, VWD
Injection Volume: 1.0 µL
Sample Solvent: Methanol
Response Time: 0.02 sec
Flow Cell: 2.5 µL semi-micro
LC System: Shimadzu Prominence UFLC XR
Extra Column Volume: ~14 µL

STRUCTURES:

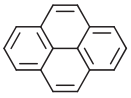


Butylbenzene

1-Phenylnaphthalene



Acenaphthene



Pyrene

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