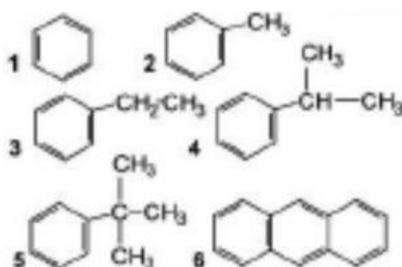
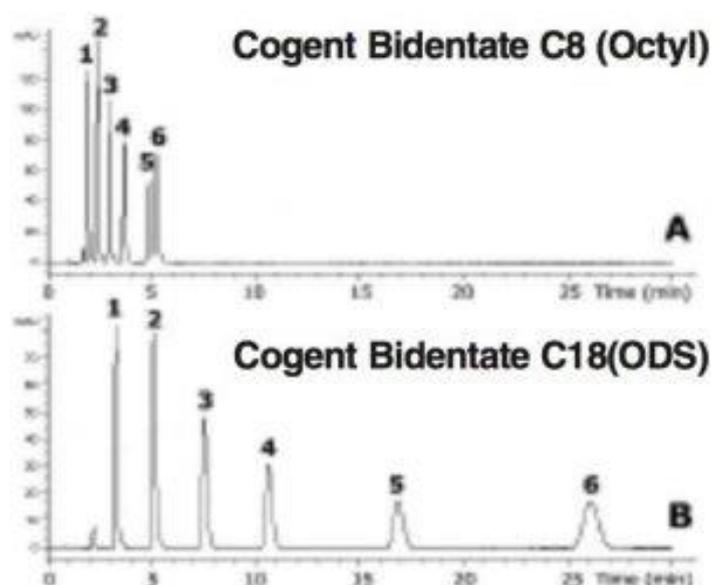


## Benzene, Toluene, Ethylbenzene, Isopropyl Benzene, Tert-Butylbenzene and Anthracene by HPLC - AppNote

### Hydrophobic Compounds Shorter Analysis Time

For separations requiring a less hydrophobic Stationary Phase, Cogent C8 can be used successfully as demonstrated in the Chromatograms. The Retention on the C8 Column is lower when compared with a C18 Column under the same Mobile Phase conditions, but since the Efficiency is excellent the separation goals can be achieved in a shorter time.

The C8 phase is suited for more hydrophobic proteins and peptides and large nonpolar organic compounds. For increased Retention higher percentages of Water in the Mobile Phase can be used. The diminished hydrophobicity is shown in *Table 1*.



#### Peaks:

1. Benzene
2. Toluene
3. Ethylbenzene

4. Isopropyl Benzene
5. Tert-Butylbenzene
6. Anthracene

## Method Conditions

### Column:

- A: Cogent Bidentate C8™ (Octyl), 4µm, 100Å
- B: Cogent Bidentate C18™ (ODS), 4µm, 100Å

### Catalog No.:

- A: 40008-75P
- B: 40018-7.5P

**Dimensions:** 4.6 x 75mm

**Mobile Phase:** 70% Methanol / 30% DI Water

**Injection vol.:** 5µL

**Flow rate:** 1mL / minute

**Detection:** UV @ 254nm

**Sample:** Universal LC Test Mix

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### Notes: Table 1

Column	k1'	k2'	a=k2'/k1'
A. Cogent C8	4.19	4.57	1.10
B. Cogent C18	19.98	31.49	1.58

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**Attachment No 44 Hydrophobic Compounds Analyzed with HPLC pdf 0.2 Mb [Download File](#)**

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