

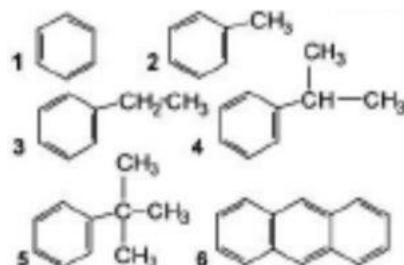
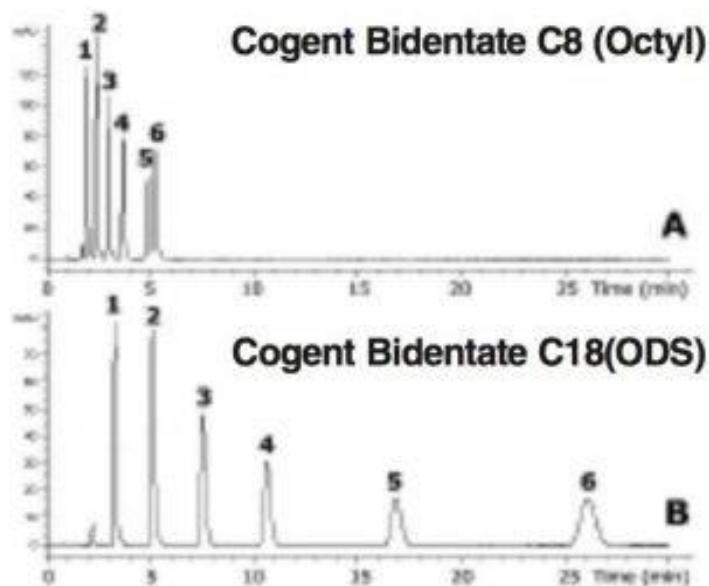


Benzene, Toluene, Ethylbenzene, Isopropyl Benzene, Tert-Butylbenzene and Anthracene by HPLC - AppNote

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

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



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

Printed from the Chrom Resource Center

Copyright 2025, All Rights Apply

MicroSolv Technology Corporation

9158 Industrial Blvd. NE, Leland, NC 28451

Tel: (732) 380-8900

Fax: (910) 769-9435

Email: customers@mtc-usa.com

Website: www.mtc-usa.com