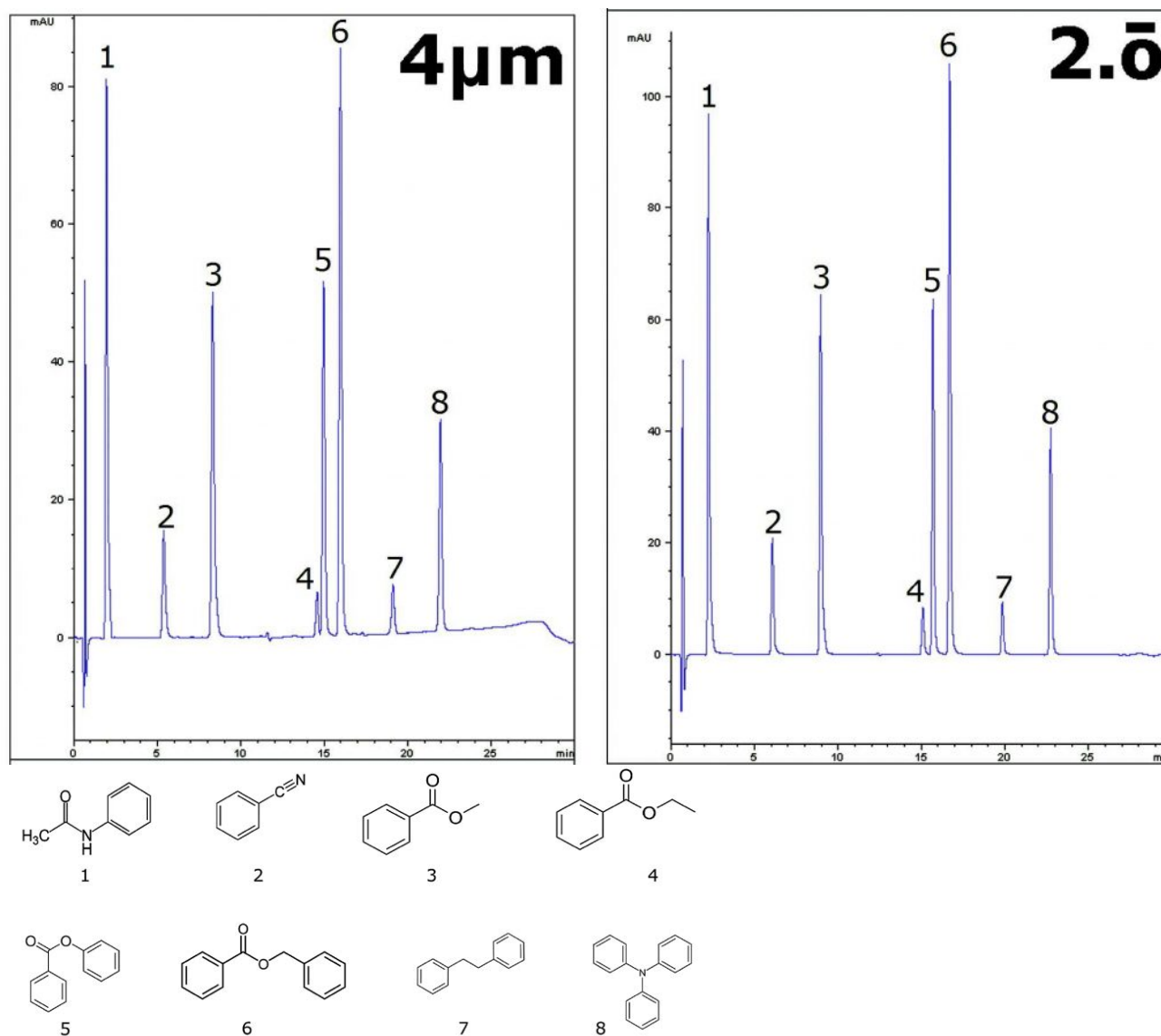


## Transfer HPLC Method to UHPLC with Hydrophobic Compounds – AppNote

### Separation of Hydrophobic Compounds by HPLC & UHPLC

This AppNote shows separation of analytes within a range of hydrophobicity. A simple gradient is used to elute all the compounds and baseline separation is obtained for the critical pair (*peaks 4 and 5*) and the least hydrophobic compound is adequately retained.

A comparison is shown in the figure below with a 4 $\mu$ m Cogent Bidentate C18 Column and a similar 2.0 (2.2 $\mu$ m) Column. The retention profiles are quite comparable, meaning Method Transfer from one Column to the other will be easy to achieve.



#### Peaks:

1. Acetanilide, 2. Benzonitrile, 3. Methyl Benzoate, 4. Ethyl Benzoate,  
5. Phenyl Benzoate, 6. Benzyl Benzoate, 7. Bibenzyl 8. Triphenylamine

## Method Conditions

**Columns:** Cogent Bidentate C18 2.0™, 2.2µm, 120Å; Cogent Bidentate C18™, 4µm, 100Å

**Catalog Nos.:** [40218-05P-2](#); [40018-05P-2](#)

**Dimensions:** 2.1 x 50mm for both Columns

**Mobile Phase:**

A: DI Water / 0.1% Formic Acid (v/v)

B: Acetonitrile / 0.1% Formic Acid (v/v)

**Gradient:**

Time (minutes)	%B
0	20
1	20
25	80
26	80
27	20

**Injection vol.:** 1 µL

**Flow rate:** 0.3mL / minute

**Detection:** UV @ 254nm

**Sample Preparation:** Mixture of solutes in 80:20:0.1 Acetonitrile / DI Water / Formic Acid Diluent. Peak identities were confirmed with individual standards.

**t<sub>0</sub>:** 0.7 minutes



**Attachment**

**No 274 Transfer HPLC Method to UHPLC with Hydrophobic Compounds pdf** 1 Mb [Download File](#)