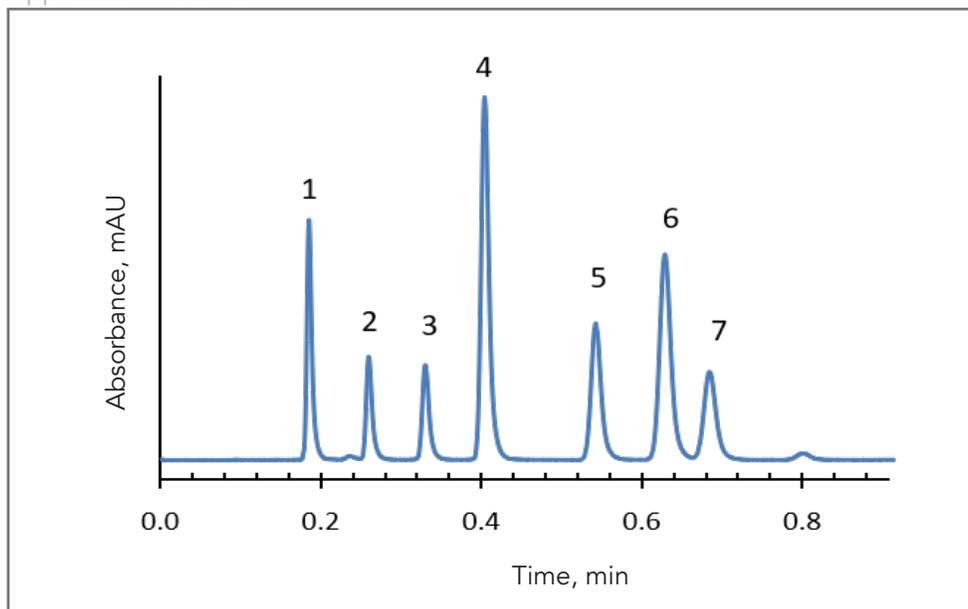




## Isocratic Separation of Anilines on HALO® C18

Application Note 20-B



### PEAK IDENTITIES:

1. p-Aminobenzoic acid
2. 1, 2-Phenylenediamine
3. p-Anisidine
4. Aniline
5. 3-Nitroaniline
6. 2-Nitroaniline
7. 4-Chloroaniline

Aniline and its derivatives are often used in the dyes industry. Here, aniline and some derivatives can be separated on the highly efficient HALO® C18 phase in less than one minute.

### TEST CONDITIONS:

**Column:** HALO 90 Å C18, 2.7 μm,  
4.6 x 50 mm

**Part Number:** 92814-402

**Mobile Phase:** 60/40 - A/B

A: 0.02 M sodium phosphate buffer, pH 7.0

B: Acetonitrile

**Flow Rate:** 2.0 mL/min

**Pressure:** 211 bar

**Temperature:** 25 °C

**Detection:** UV 254 nm, VWD

**Injection Volume:** 1.0 μL

**Sample Solvent:** 50/50 ACN/water

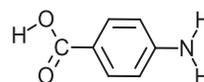
**Response Time:** 0.02 sec

**Flow Cell:** 2.5 μL semi-micro

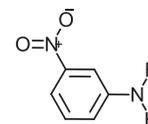
**LC System:** Shimadzu Prominence UFLC XR

**Extra Column Volume:** ~14 μL

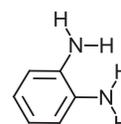
### STRUCTURES:



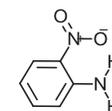
p-Aminobenzoic acid



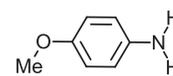
3-Nitroaniline



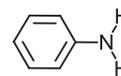
1,2-phenylenediamine



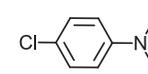
2-Nitroaniline



p-Anisidine



Aniline



4-Chloroaniline

