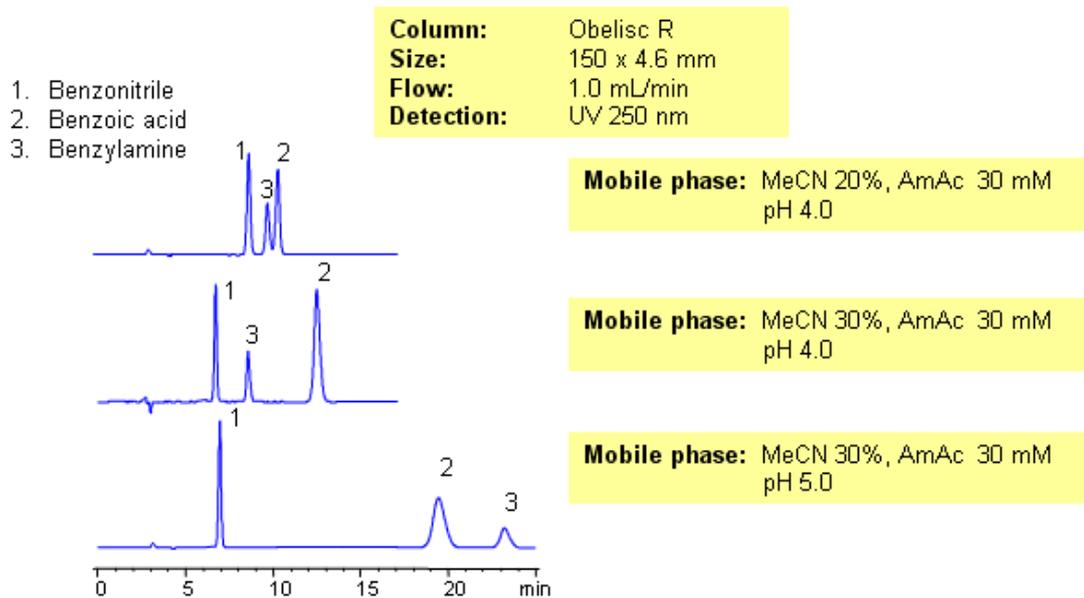


## Effect of mobile phase composition on retention of 3 compounds on Obelisc R



This application shows the effect of mobile phase composition on retention of acidic, basic and neutral compound. Retention of basic and acidic compounds is controlled by buffer pH and concentration, while retention of neutral compound is controlled by the amount of acetonitrile. Buffer pH changes not only ionization state of ionizable basic and acidic compounds, but ionization state of trimodal stationary phase Obelisc R. Available detection techniques include UV, ELSD, LC/MS, and Corona.

SIELC has developed the Obelisc™ columns, which are mixed-mode and utilize Liquid Separation Cell technology (LiSC™). These cost-effective columns are the first of their kind to be commercially available and can replace multiple HPLC columns, including reversed-phase (RP), AQ-type reversed-phase, polar-embedded group RP columns, normal-phase, cation-exchange, anion-exchange, ion-exclusion, and HILIC (Hydrophilic Interaction Liquid Chromatography) columns. By controlling just three orthogonal method parameters - buffer concentration, buffer pH, and organic modifier concentration - users can adjust the column properties with pinpoint precision to separate complex mixtures.

### Method Parameters

<b>Column</b>	Obelisc R, 4.6x150 mm, 5 µm, 100 Å
<b>Mobile Phase</b>	MeCN/H <sub>2</sub> O
<b>Buffer</b>	AmAc
<b>Flow Rate</b>	1.0 mL/min
<b>Detection</b>	250

Quelle: <https://sielc.com/Application-Effect-of-Mobile-Phase-Composition-on-Retention-of-3-Compounds-on-Obelisc-R>