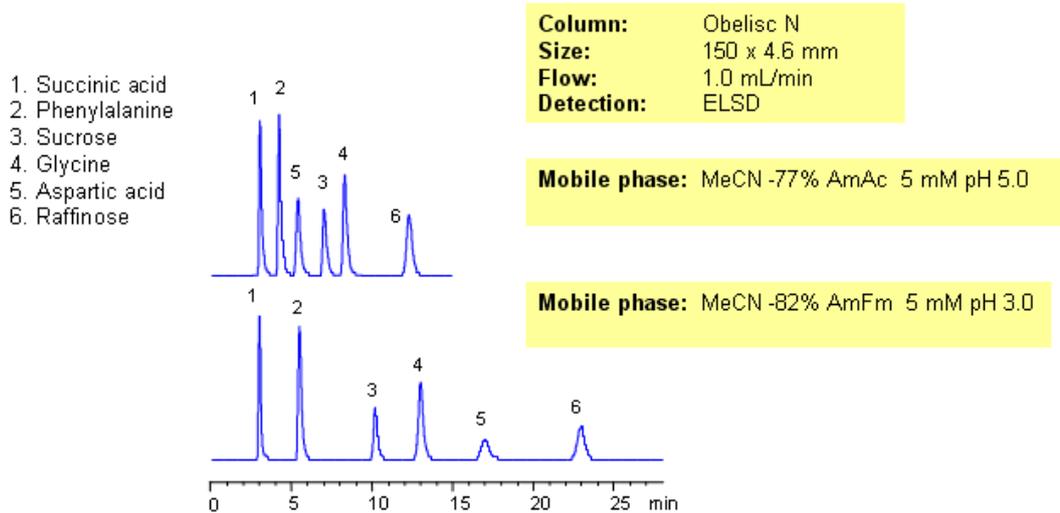


Effect of Both pH and Organic Content on a Separation of Sugars, Amino Acids, and Carboxylic Acids



In mixed-mode HILIC chromatography, selectivity of separation can be adjusted by amount of acetonitrile, amount of buffer and buffer pH. Buffer concentration and pH will affect retention of ionizable compounds to a different degree. Retention of neutral compounds can be adjusted by the amount of acetonitrile. Carboxylic acid, three amino acids and two sugars are separated by combination of HILIC and ion-exchange mechanisms. Compounds can be monitored by ELSD, Corona (CAD), LC/MS or low UV. UV-transparent mobile phase /buffer is required for UV monitoring of this mixed-mode separation. This HPLC method can be adopted as general approach for analysis of sugars, amino acids and carboxylic acids.

Method Parameters

Column	Obelisc N, 4.6x150 mm, 5 µm, 100 Å
Mobile Phase	MeCN/H2O
Buffer	AmAc
Flow Rate	1.0 mL/min
Detection	ELSD

Quelle: <https://sielc.com/Application-Effect-of-Both-PH-and-Organic-Content-on-A-Separation-of-Sugars-Amino-Acids-and-Carboxylic-Acids>