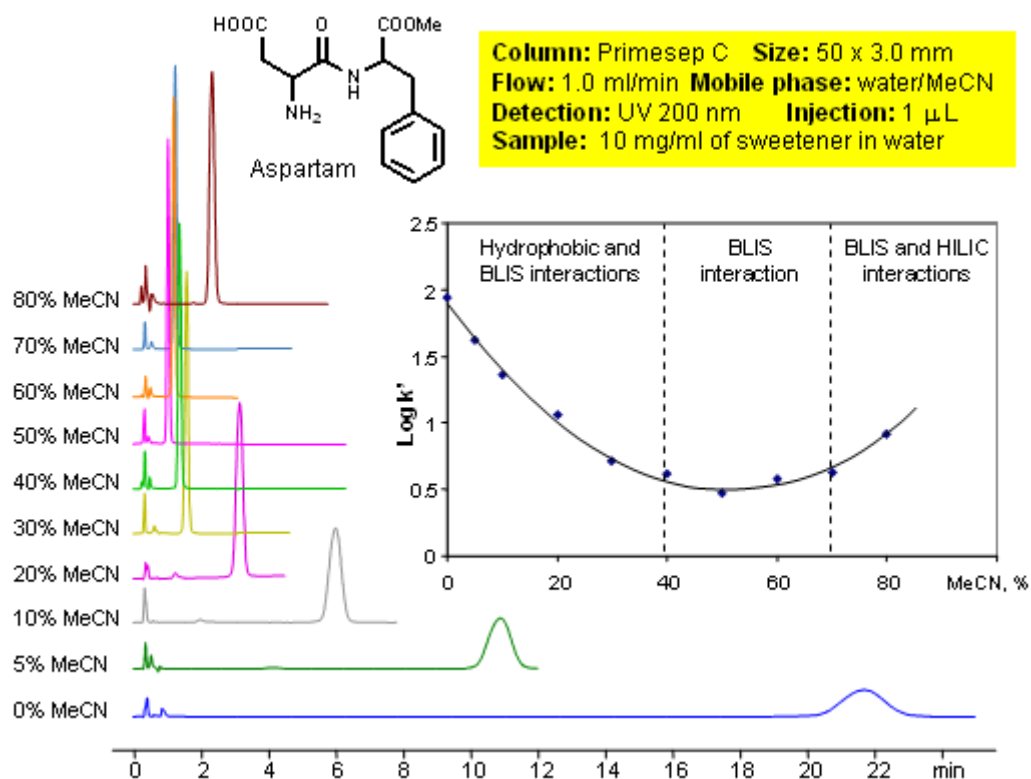


Bufferless Ion Separation (BLIS™) Chromatography of Aspartame: Organic Modifier Effect

<https://sielc.com/Application-Bufferless-Ion-Separation-BLIS-Chromatography-of-Aspartame-Organic-Modifier-Effect>

Chromatogram



Description

An organic modifier effect of changing acetonitrile percentage the mobile phase is demonstrated on a Primesep C HPLC column in a bufferless ion (BLIS™) separation. With decreasing percent acetonitrile, the artificial sweetener, Aspartame, first decreases in retention time and then increases. The changing mobile phase composition changes the retention mechanism from hydrophobic and BLIS™ interactions, to BLIS™ alone, to BLIS™ and HILIC (hydrophilic liquid chromatography) interactions. Aspartame is composed of the two amino acids, aspartic acid and phenylalanine as the ethyl ester. Mobile phases composed of water and acetonitrile (MeCN, ACN,) and ultraviolet (UV) detection was used.