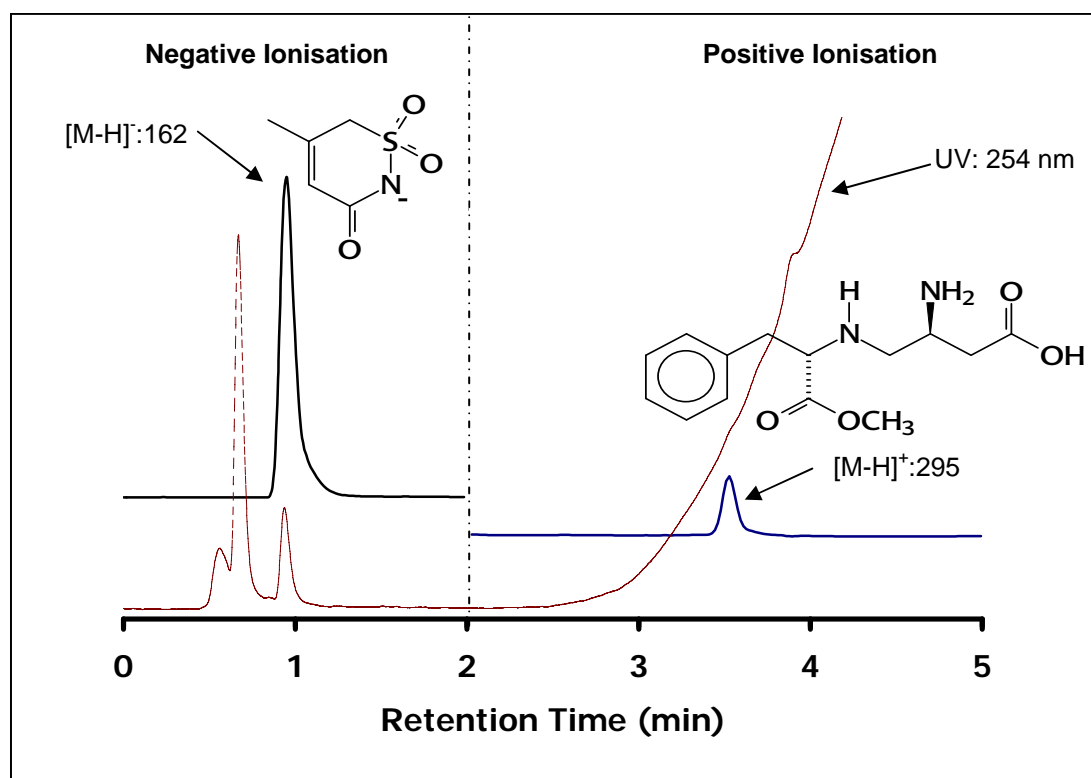


## ZIC® -HILIC Separation of Acesulfame K and Aspartam

### Chromatographic Conditions

- Column: ZIC®-HILIC, PEEK 100 x 2.1 mm, 3.5  $\mu$ m, 100A (P/N 1.50441.0001)  
 Injection: 2  $\mu$ L of a degassed soft drink diluted 1:10 with initial mobile phase  
 Detection: Shimadzu LC-2010 Evolution, Detector voltage: 2.0 kV  
 Heat block temp: 200  $^{\circ}$ C; CDL temp: 200  $^{\circ}$ C;  
 SIM mode: m/z 162.0 (Acesulfame K), and 295 (Aspartam)  
 Flow Rate: 0.4 mL/min  
 Mobile Phase (v/v): A: Acetonitrile: NH<sub>4</sub>OAc 90:10 v/v; total ionic strength 10 mM; pH 6.8  
 B: Acetonitrile: NH<sub>4</sub>OAc 10:90 v/v; total ionic strength 10 mM; pH 6.8  
 Gradient: Initial composition: 100% A. Linear gradient from 0-5 min with 10% increase of B/min, followed with 5 min re-equilibration with initial  
 Temperature: 40  $^{\circ}$ C  
 Pressure Drop: 8.8 MPa (1267 psi)



### Chromatographic Data

No.	Compound	Ionization mode	m/z	Time (min)	Retention factor*
1	void volume ( $t_0$ )			0,6	-
2	Acesulfame K	negative	162	1,0	0,6
3	Aspartame	positive	295	3,5	4,9