



Additives & Sweeteners in Energy drink - separation of Acesulfame K, Saccharin, Benzoic acid, Sorbic acid, Caffeine, Aspartame - using a Chromolith RP-18e column

Chromatography

Substance class : XanthinesSweetenersPreservatives

Matrix : Energy drink

Chromatographic conditions

Column : Chromolith® SpeedRod RP-18 endcapped (Cat. No. 1.51450)

Mobile Phase : A: acetonitrile (LiChrosolv® Cat. No.100030) B: 0.01M phosphate buffer pH 5.0

Gradient : 0.0 min 97% B; 2.5 min 97% B; 2.6 min 92% B; 5.0 min 92% B

Flow rate : 4 mL/min

Detection : UV 227 nm

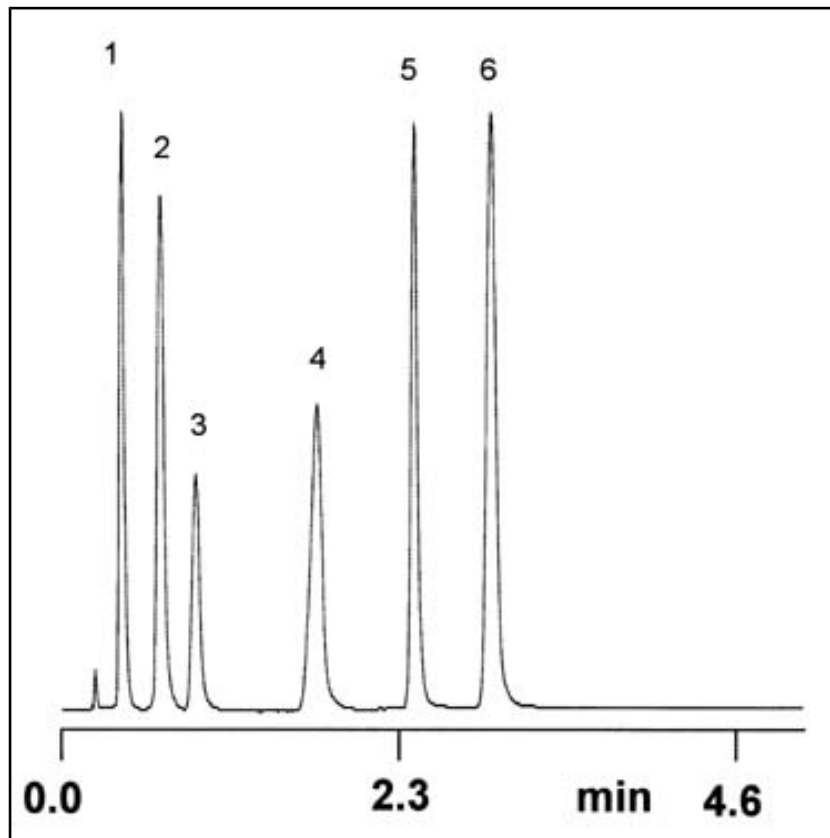
Temperature : ambient

Inject. volume : 10 µL

Sample : 1. Acesulfame - K (23 µg/mL); 2. Saccharin (29 µg/mL); 3. Benzoic acid (13 µg/mL); 4. Sorbic acid (14 µg/mL); 5. Caffeine (47 µg/mL); 6. Aspartame (100 µg/mL)



Figure



Source

Chromolith Application Note

Ordering Information

Product	Catalog No.
Chromolith® SpeedROD RP-18 endcapped 50-4.6 HPLC column	151450
Acetonitrile gradient grade for liquid chromatography LiChrosolv® Reag. Ph Eur	100030