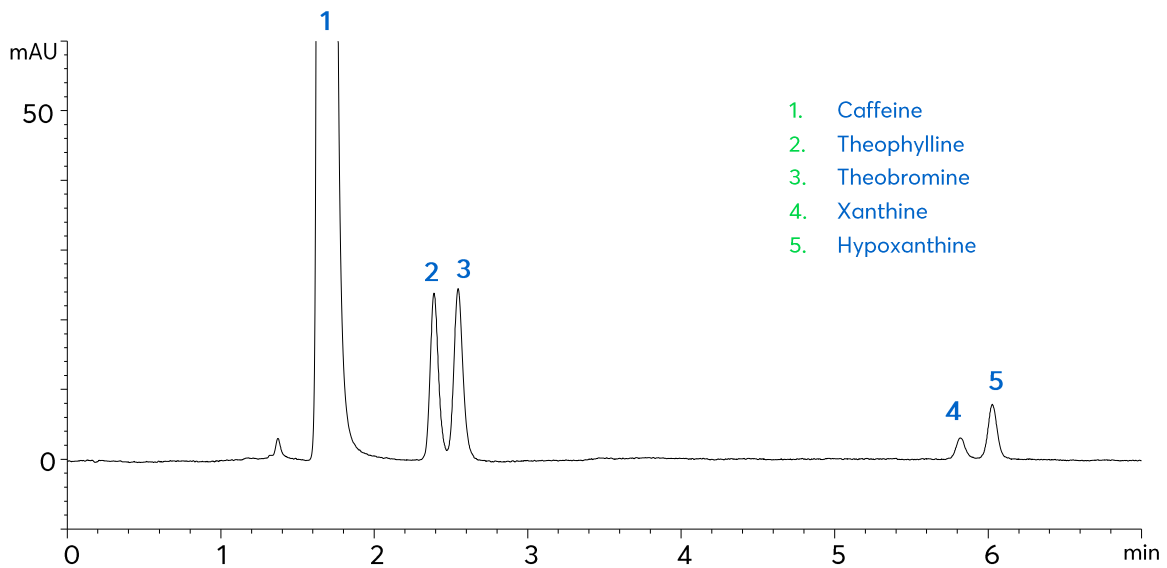


Application note #4540

Caffeine and Related Compounds using HILIC Mode



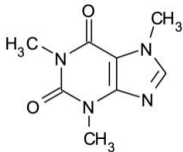
Method Details

CONDITIONS

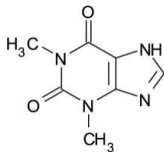
Column: ACE 5 HILIC-N
 Dimensions: 150 x 4.6 mm
 Mobile Phase: A: 10 mM ammonium formate pH 3.0 in MeCN/H₂O (96:4 v/v)
 B: 10 mM ammonium formate pH 3.0 in MeCN/H₂O (50:50 v/v)

Time (mins)	%B
0	0
15	100

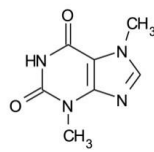
Flow Rate: 1.5 mL/min
 Injection: 2 µL
 Temperature: 15 °C
 Detection: UV, 275 nm
 Sample: Caffeine (25 mg/mL) with related substances at 0.5% w/w, dissolved in MeCN/H₂O (90:10 v/v).



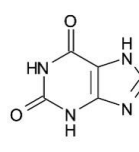
1. Caffeine



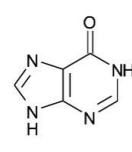
2. Theophylline



3. Theobromine



4. Xanthine



5. Hypoxanthine

ORDERING TABLE

Product	Details	Size	Part number
Avantor® ACE® 5 HILIC-N	HPLC column	150 x 4.6 mm	HILN-5-1546U
Acetonitrile	VWR CHROMANORM® gradient grade	2.5 L	83639.320
Water	VWR CHROMANORM® gradient grade	2.5 L	83650.320
Ammonium formate	VWR CHROMANORM® for LC-MS	100 g	84884.180