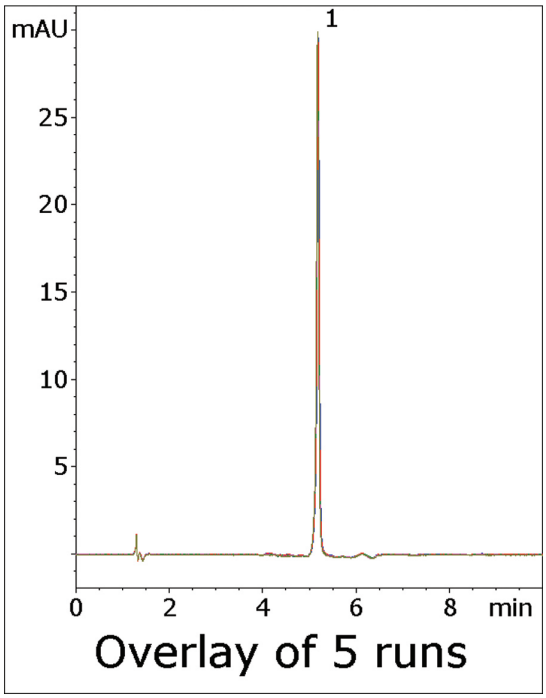
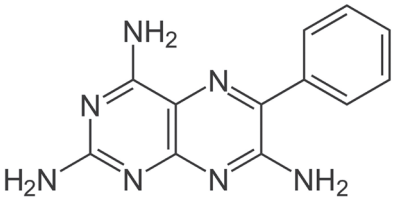
Triamterene

Symmetrical peak shape without ion pair agents





Triamterene

Note: Triamterene is a potassium-sparing diuretic which is used in treatment of hypertension and edema. It can be used alone or in combination with thiazide diuretics.

Method Conditions

Column: **Cogent Diamond Hydride™**, 4µm, 100Å

Catalog No.: 70000-7.5P

Dimensions: 4.6 x 75 mm

Solvent: A: DI H_2O / 10 mM ammonium formate
B: 95/5 acetonitrile / 10 mM ammonium formate (v/v)

Gradient:

time (min.)	%B
0	100
2	100
6	70
7	100

Post Time: 3 min

Injection vol.: 1µL

Flow rate: 1.0 mL/min

Detection: UV 325 nm

Sample: **Stock Solution:** 1 mg/mL triamterene in methanol diluent. The solution was heated at 50°C for 10 min to facilitate dissolution and then filtered with a 0.45µm nylon filter (MicroSolv Tech Corp.).
Working Solution: 100µL of stock solution was diluted with 900µL of a 50/50 solvent A/solvent B (v/v) diluent.

Peak: 1. Triamterene

t_0: 0.9 min

Discussion

Triamterene has numerous amine functional groups and therefore tails readily in reversed phase methods if ion pair agents are not used in the mobile phase. However, these additives not only contribute to a less robust method in terms of reproducibility of analyte retention, but are also incompatible with mass spectrometry detection. With the Cogent Diamond Hydride column and this method, on the other hand, an excellent peak shape can be easily obtained using an ammonium formate-based mobile phase.

MANUFACTURED BY:
MICROSOLV TECHNOLOGY CORPORATION
9158 Industrial Blvd NE
Leland, NC 28451
p: 1.732.380.8900
f: 1.910.769.9435
customers@mtc-usa.com
www.Cogent-HPLC.com