

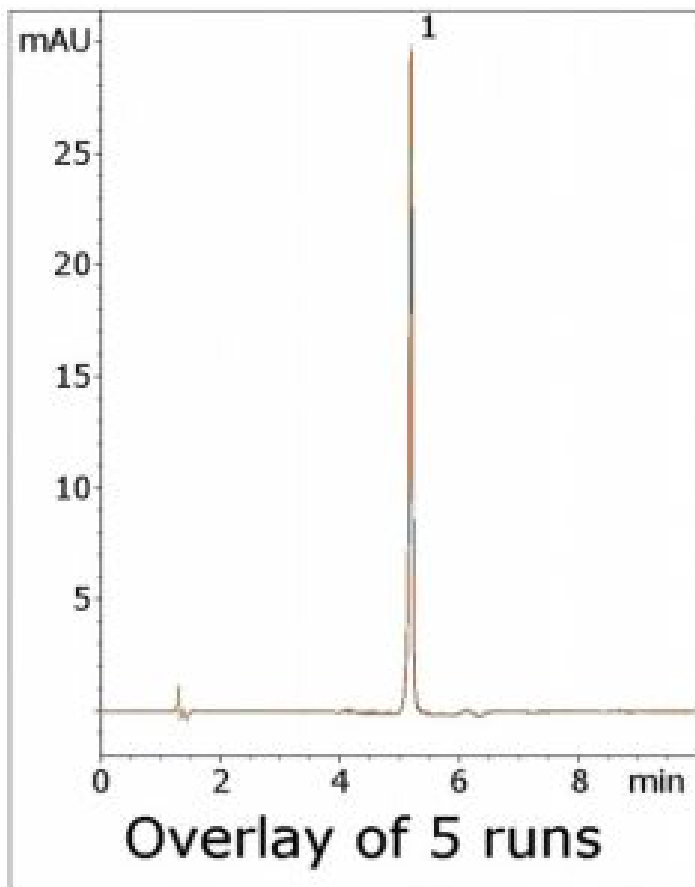


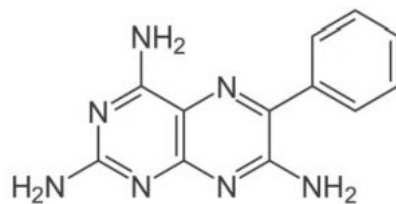
Triamterene Analyzed with HPLC - AppNote

Symmetrical Peak Shape without Ion Pair Agents

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.

In this Method, an excellent Peak shape can be easily obtained using an Ammonium Formate based Mobile Phase.





Triamterene

Peak:

Method Conditions

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

Catalog No.: 70000-7.5P

Dimensions: 4.6 x 75mm

Mobile Phase:

A: DI Water / 10 mM Ammonium Formate

B: 95:5 Acetonitrile / 10 mM Ammonium Formate (v/v)

Gradient:

Time (minutes)	%B
0	100
2	100
6	70



7

100

Post Time: 3 minutes

Injection vol.: 1 μ L

Flow rate: 1.0mL / minute

Detection: UV @ 325nm

Sample Preparation:

Stock Solution: 1mg / mL Triamterene in Methanol diluent. The solution was heated at 50°C for 10 minutes to facilitate dissolution and then filtered with a 0.45 μ m Nylon Syringe Filter (MicroSolv Tech Corp.).

Working Solution: 100 μ L of stock solution was diluted with 900 μ L of a 50:50 Solvent A / Solvent B (v/v) diluent.
t₀: 0.9 minutes

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.



Attachment



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