

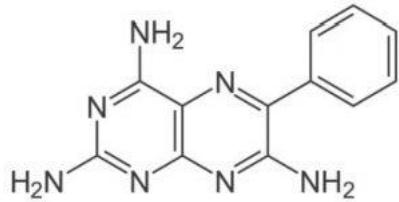
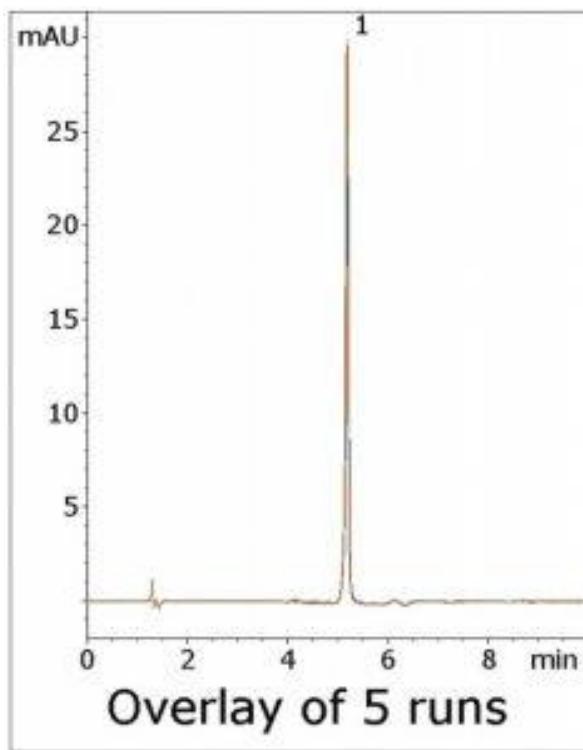


## Triamterene Analyzed with HPLC - AppNote

### 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.



**Peak:**

Triamterene

### 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 $\mu$ 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 $\mu$ m Nylon Syringe Filter (MICROSOLV Tech Corp.).

**Working Solution:** 100 $\mu$ L of stock solution was diluted with 900 $\mu$ L of a 50:50 Solvent A / Solvent B (v/v) diluent.

**t<sub>0</sub>:** 0.9 minutes

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**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.

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**Attachment No 181 Triamterene Analyzed with HPLC pdf 0.3 Mb [Download File](#)**

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