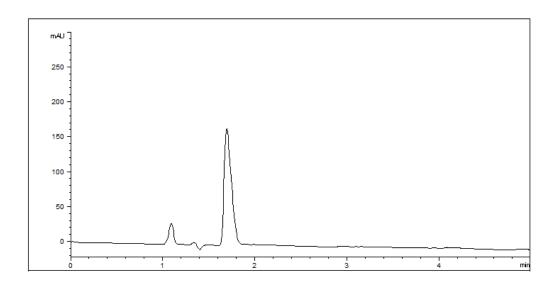


Guanidine analyzed with HPLC- AppNote

A Straightforward HPLC-UV method for Guanidine

A simple Method was developed for the analysis of Guanidine, a highly basic (pKa 12.5), and polar compound. Precolumn derivatization was not used in this method, but if higher sensitivity is needed for lower concentrations, ELSD could be employed.



$$\begin{array}{c} \text{NH} \\ \downarrow \\ \text{H}_2 \text{N} \end{array} \begin{array}{c} \text{NH}_2 \end{array}$$

Guanidine

Peaks:

1. Impurity

2. Guanidine

Method Conditions

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

Catalog No.: 70000-10P

Dimensions: 4.6 mm x 100mm

Mobile Phase: 50% DI Water / 50% Acetonitrile / 0.1% Formic Acid

Injection vol.: 1µL

Flow rate: 1.0 mL / minute



Detection: UV @195 nm

Sample Preparation: 1.7 mg/mL Guanidine in Mobile phase

Note: This method could be used for clearance testing of guanidine in biopharmaceutical products.



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