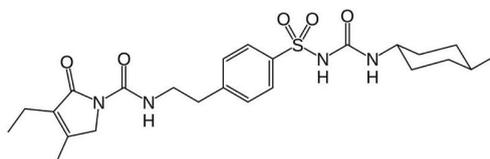
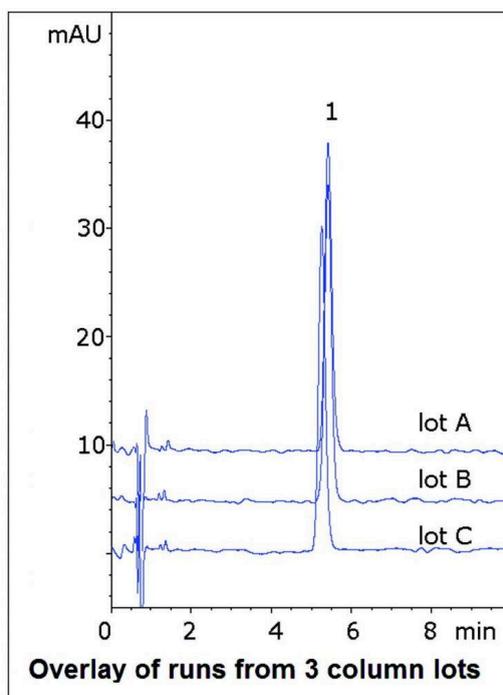


## Glimepiride Tablet Analyzed with HPLC - AppNote

### Isocratic Assay Method for a Diabetes Drug

In this study, an Isocratic, HPLC Method for Glimepiride Analysis in a tablet formulation is presented. The USP Assay Method for this drug calls for a Phosphate Buffer and is therefore not LCMS compatible. This Method uses Formic Acid instead and produces a Symmetrical, well-Retained Peak. Therefore the analysis could be applied to various LCMS studies as well if desired, such as with clinical laboratories dealing with biological extracts.

Data from three different Column lots is shown in the figure in order to demonstrate the Method Reproducibility and Robustness.



**Peak:** Glimepiride

### Method Conditions

**Column:** Cogent Bidentate C18™, 4 µm, 100 Å

**Catalog No.:** 40018-75P

**Dimensions:** 4.6 x 7 5mm

**Mobile Phase:** 50:50 DI Water / Acetonitrile with 0.1% Formic Acid (v/v)

**Injection vol.:** 5 µL

**Flow rate:** 1 mL / minute

**Detection:** UV @ 230 nm

**Sample Preparation:** 1 mg strength Glimepiride Tablet was ground and transferred to a 4 mL volumetric flask. A portion of 50:50 Acetonitrile / DI Water was added and the flask was sonicated 10 minutes. It was then diluted to mark and mixed. A portion was filtered with a 0.45 µm Nylon Syringe Filter (MICROSOLV Tech Corp.) and diluted 1:10.

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

---

**Note:** *Glimepiride is a sulfonylurea drug indicated to treat type 2 Diabetes Mellitus. It works by increasing insulin production in the pancreas. It is sold under trade names such as Amaryl®.*

---



**Attachment No 253 Glimepiride Tablet Analyzed by HPLC pdf 0.4 Mb** [Download File](#)

Printed from the Chrom Resource Center

Copyright 2025, All Rights Apply

**MicroSolv Technology Corporation**

9158 Industrial Blvd. NE, Leland, NC 28451

Tel: (732) 380-8900

Fax: (910) 769-9435

Email: [customers@mtc-usa.com](mailto:customers@mtc-usa.com)

Website: [www.mtc-usa.com](http://www.mtc-usa.com)