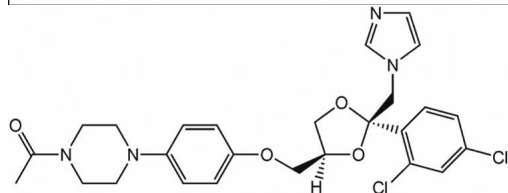
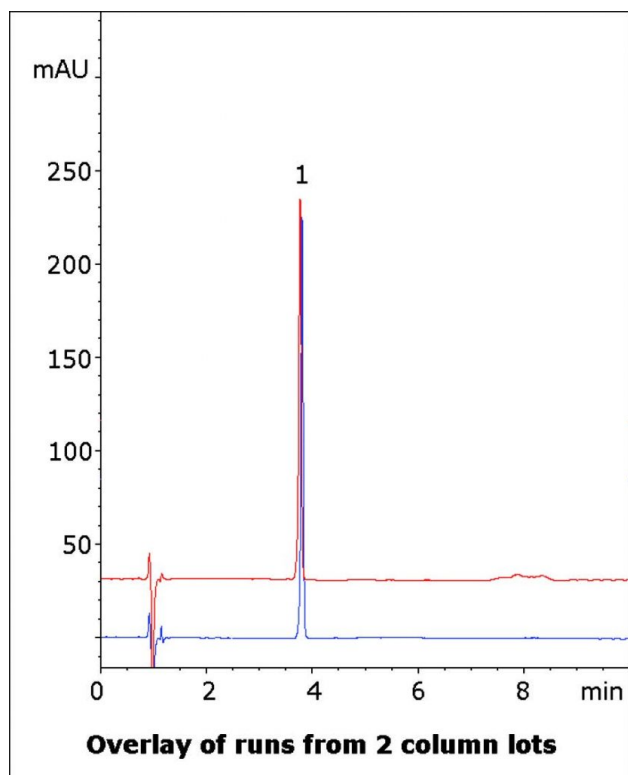


## Ketoconazole Analyzed with HPLC – AppNote

### Lipophilic Ketoconazole Retained using Aqueous Normal Phase HPLC

Ketoconazole is a significantly lipophilic molecule ( $\log P \sim 3.8$ ) and is not generally suitable to ordinary Methods based on Hydrophilic Retention (*HILIC*). However, in this Method it is well retained using Aqueous Normal Phase (*Inverse Gradient*), therefore it is an Orthogonal Assay Method. This can be used in addition to standard Reversed Phase approaches since demonstrating orthogonality is very beneficial in a pharmaceutical analytical Method.

The data presented illustrates how this Method can be used to retain Hydrophobic Compounds very well and with Precision and Robustness as shown by the two overlaid Chromatograms from two different Column Lots.



#### Peak:

Ketoconazole

#### Method Conditions

**Column:** Cogent Diamond Hydride™, 4 $\mu$ m, 100Å

**Catalog No.:** 70000-7.5P

**Dimensions:** 4.6 x 75mm

Printed from the Chrom Resource Center

Copyright 2024, 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)

**Mobile Phase:**

A: DI Water with 0.1% Trifluoroacetic Acid TFA (v/v)

B: Acetonitrile with 0.1% Trifluoroacetic Acid TFA (v/v)

**Gradient:**

Time (minutes)	%B
0	95
1	95
6	50
7	95

**Post Time:** 3 minutes

**Injection vol.:** 2µL

**Flow rate:** 1.0mL / minute

**Detection:** UV @ 225nm

**Sample Preparation:** 1mg Ketoconazole USP Reference Standard was dissolved in 1mL of 50:50 Solvent A / Solvent B. This stock Solution was diluted 1:10 for HPLC injections using the same diluent.

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

**Attachment**

No 209 Ketoconazole Analyzed with HPLC pdf 0.3 Mb [Download File](#)

Printed from the Chrom Resource Center

Copyright 2024, 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)