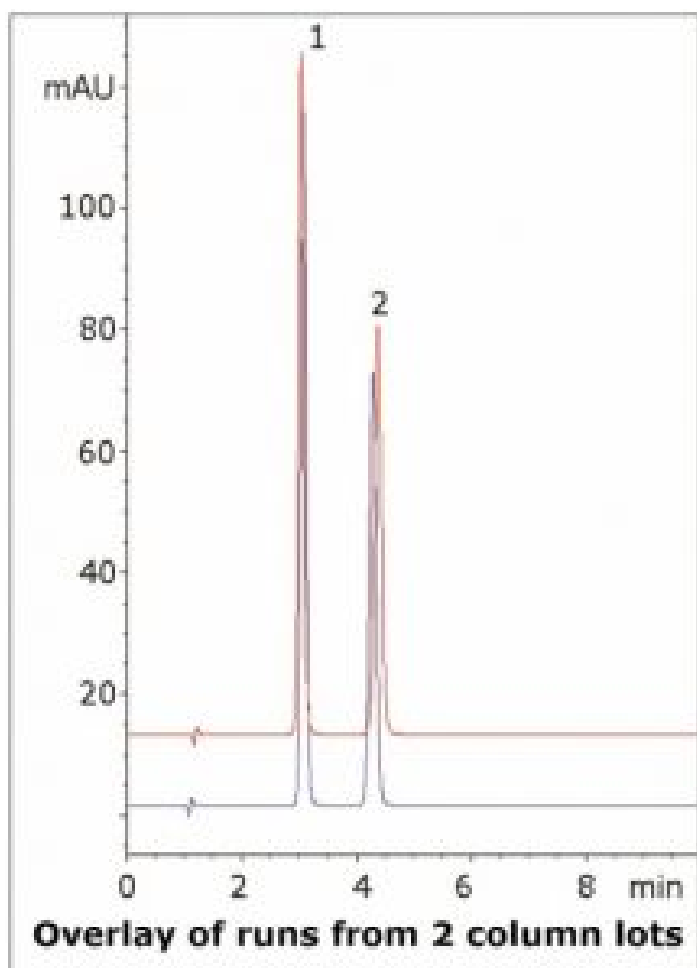


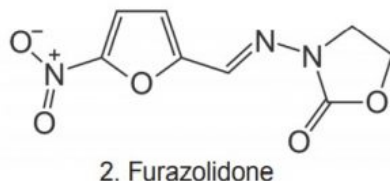
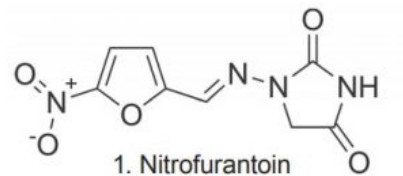
Furazolidone Analyzed by HPLC – AppNote

Improved Specificity Compared to USP Assay Method

The USP Assay Method for Furazolidone is performed by UV Spectrophotometry. This HPLC Method provides more Robustness and Specificity for the analysis. Separation of Furazolidone from the structurally similar compound Nitrofurantoin is shown in the figure.

Nitrofurantoin can be used as an internal standard to obtain more robust Quantitation. Furthermore, the ability of this Method to distinguish amongst similar compounds demonstrates how it is less prone to interference from impurities or degradants. Two Chromatograms are overlaid to present the precision of the Method using two different Columns made from different lots.





Peaks:

1. Nitrofurantoin (Internal Standard)
2. Furazolidone

Method Conditions

Column: Cogent Bidentate C8™, 4μm, 100Å

Catalog No.: 40008-75P

Dimensions: 4.6 x 75mm

Mobile Phase: 80% DI Water / 20% Acetonitrile / 0.1% Formic Acid (v/v)

Injection vol.: 1μL

Flow rate: 1.0mL / minute

Detection: UV @ 367nm

Sample Preparation: 1mg Furazolidone and 1mg Nitrofurantoin USP reference standards were dissolved in 1mL of the Mobile Phase. The solution was then diluted 1:10 with the same diluent. Peak identities were confirmed with individual standards.

t₀: 0.9 minutes

Note: Furazolidone is an antibacterial Nitrofuran. It is used in both human and veterinary medicine. It is available under the trade name Furoxone®.



Attachment

No 205 Furazolidone Analyzed by HPLC pdf 0.6 Mb [Download File](#)

Printed from the Chrom Resource Center

MicroSolv Technology Corporation

9158 Industrial Blvd. NE, Leland, NC 28451

tel. (732) 380-8900, fax (910) 769-9435

Email: customers@mtc-usa.com

Website: www.mtc-usa.com

Date: 02-05-2024