MICROS

Cetylpyridinium Chloride Analyzed with HPLC – AppNote

Excellent Peak Shape for a Cationic Compound Commonly found in Household Products

This Method demonstrates the potential to avoid Peak Tailing or Band Broadening with cationic compounds due to interaction with Silanols on the surface of Reversed Phase Column. Tailing can cause interference with Quantitation of a nearby Peak of interest as well.

Since Cetylpyridinium Chloride is present in numerous household products that may require HPLC analysis, this is an important point to consider even for Assays where the analyte Peak has good Symmetry.



Peak: Cetylpyridinium Chloride

Method Conditions

Column: Cogent Diamond Hydride[™], 4μm, 100Å **Catalog No**.: 70000-7.5P **Dimensions**: 4.6 x 75mm



Mobile Phase: 4:96 DI Water / Acetonitrile with 0.1% Trifluoroacetic Acid (TFA) v/v
Injection vol.: 2μL
Flow rate: 1.0mL / minute
Detection: UV @ 215nm
Sample Preparation: 1mg Cetylpyridinium Chloride USP Reference Standard was dissolved in 1mL of 50:50 DI
Water / Acetonitrile / 0.1% Formic Acid. This stock solution was diluted 1:10 for HPLC injections using the same

to: 0.9 minutes

diluent.

Note: Cetylpyridinium Chloride is an antiseptic additive that is used in many common household products such as toothpaste, mouthwash, and nasal sprays.



Attachment

No 211 Cetylpyridinium Chloride Analyzed with HPLC pdf 0.4 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: 05-21-2024