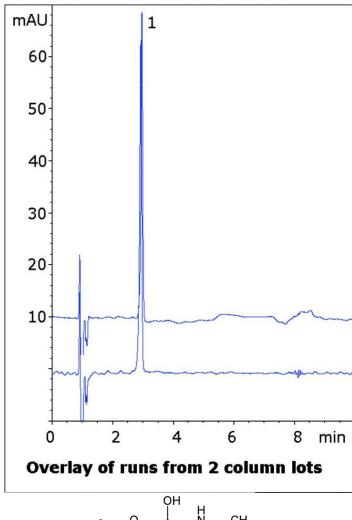


# Metoprolol Tartrate Analyzed with HPLC - AppNote

## **Excellent Peak Shape for an Organic Amine**

This Assay is easy to perform with a well-retained analyte Peak. Since Peak Tailing can often be an issue with organic amines, such as this compound, using conventional HPLC Columns it is notable that this Method produces a very Symmetrical Peak.

In the Chromatogram below, an overlay of injections from two lots of Columns is shown to illustrate Robustness and Precision of the Method which is suitable for routine assay of Metoprolol Tartrate Formulations.



Peak:

Metoprolol

## **Method Conditions**

**Column**: Cogent Diamond Hydride<sup>™</sup>, 4μm, 100Å

Catalog No.: 70000-7.5P



**Dimensions**: 4.6 x 75mm

**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.: 1µL

Flow rate: 1.0mL / minute Detection: UV @ 215nm

Sample Preparation: 1mg Metoprolol Tartrate 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**0: 0.9 minutes

**Note:** Metoprolol is a selective  $\beta$ 1 receptor blocker. It is used to treat various cardiovascular conditions such as hypertension. Various trade names for the drug are available such as Lopressor® and Toprol®. It is sometimes found in combination formulations with hydrochlorothiazide.



### Attachment

No 208 Metoprolol Tartrate 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: 05-15-2024