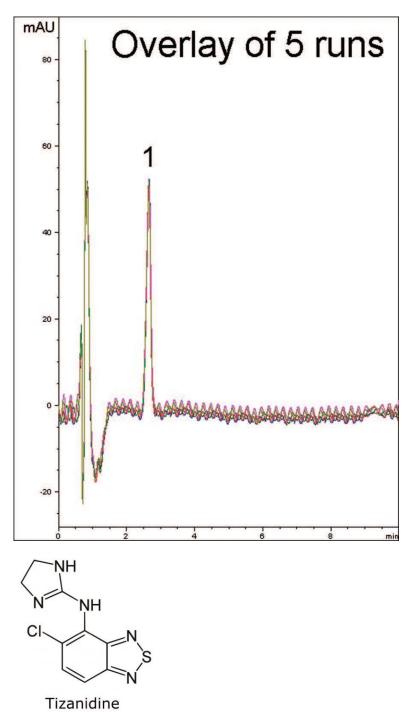
# MICROS

## Tizanidine HCl Tablet with Precision – AppNote

### **Excellent Run to Run Precision**

Tizanidine has several amine groups which can present problems to chromatographers. Residual silanols on the surface of ordinary Silica-based Columns can electrostatically interact with these groups, causing peak tailing.

The Cogent Amide Column, used in the Application Note is virtually free of residual silanols and therefore a symmetrical peak shape can be obtained. An overlay of five consecutive runs demonstrates the run- to-run precision when using these columns.



# MICROS

#### **Peak:**

#### Tizanidine

### **Method Conditions**

Column: Cogent Amide™, 4µm, 100Å

Catalog No.: 40036-05P

Dimensions: 4.6 x 50mm

#### Mobile Phase:

A: 90% DI Water / 10% Acetonitrile / 0.1% Formic Acid (v/v)

B: Acetonitrile / 0.1% Formic Acid (v/v)

#### Gradient:

| Time (Minutes) | %B |
|----------------|----|
| 0              | 90 |
| 2              | 90 |
| 6              | 40 |
| 7              | 90 |

Flow rate: 1.0 mL/minute

Detection: UV @ 230nm

Injection vol.: 3µL

#### **Sample Preparation:**

4 mg strength Tizanidine HCl tablet was ground and weighed in a 10 mL volumetric flask. A portion of 50/50 solvent A/ solvent B diluent was added and the flask was sonicated 10 minutes. It was then diluted to mark and filtered with a 0.45µm Nylon syringe filter (MicroSolv Tech Corp). An aliquot was then diluted 1:10 with a diluent of 10% solvent A / 90%.

**Note:** Tizanidine is a centrally acting  $\alpha^2$ - adrenergic agonist used to treat spasms, cramping, tightness of muscles, and related conditions. It is available under the trade name Zanaflex<sup>®</sup> as well as generic versions.



Attachment

No 356 Tizanidine Amide.pdf 0.5 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: 04-05-2024