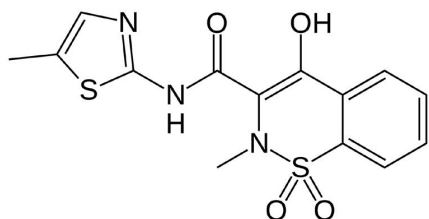
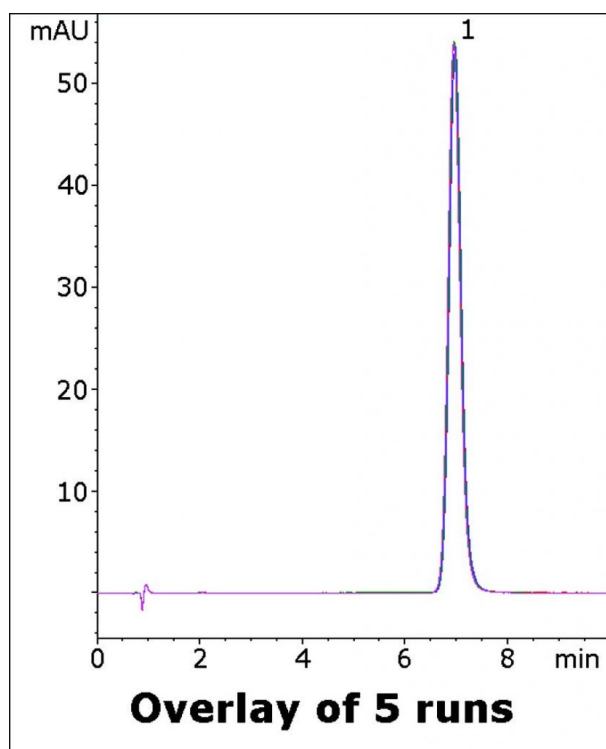


Meloxicam Tablet Analyzed with HPLC – AppNote

Rapid, Reliable Isocratic Method for this API

The USP Assay Monograph Method for Meloxicam uses a phosphate based Mobile Phase. In this application note, a 0.1% Formic Acid additive is chosen in lieu of phosphates in order to be LCMS compatible.

The System Suitability requirement is not more than 2.0 for Tailing factor. Highly Symmetrical Peaks are obtained with this Method which is easy to perform and is suitable for routine Assay of Meloxicam Tablets. Five Chromatograms are overlaid below to demonstrate the Robustness and Precision of this Method.



Peak:

Meloxicam

Method Conditions

Column: Cogent UDC-Cholesterol™, 4μm, 100Å

Catalog No.: 69069-7.5P

Dimensions: 4.6 x 75mm

Mobile Phase: 60:40 DI Water / Acetonitrile with 0.1% Formic Acid (v/v)

Injection vol.: 10μL

Flow rate: 1.0mL / minute

Detection: UV @ 362nm

Sample Preparation:

Stock Solution: 15mg strength Meloxicam tablet was ground and added to 50mL volumetric flask containing a portion of the Mobile Phase as diluent. It was sonicated 10 minutes and diluted to mark. A portion was filtered through a 0.45µm Nylon Syringe Filter (MicroSolv Tech Corp.).

Working Solution: The stock solution was diluted 1:10 with the Mobile Phase diluent.

Note: Meloxicam is a non-steroidal anti inflammatory drug which is used for treatment of various inflammatory illnesses, including osteoarthritis and rheumatoid arthritis. It acts by inhibition of Cyclooxygenase, which catalyzes the conversion of Arachidonic Acid to Prostaglandin H₂. In this manner, it interferes with the synthesis of prostaglandins, which mediate inflammation.



Attachment

No 192 Meloxicam Tablet Analyzed with HPLC pdf 0.3 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: 05-05-2024