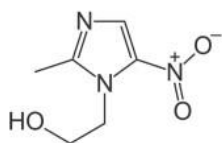
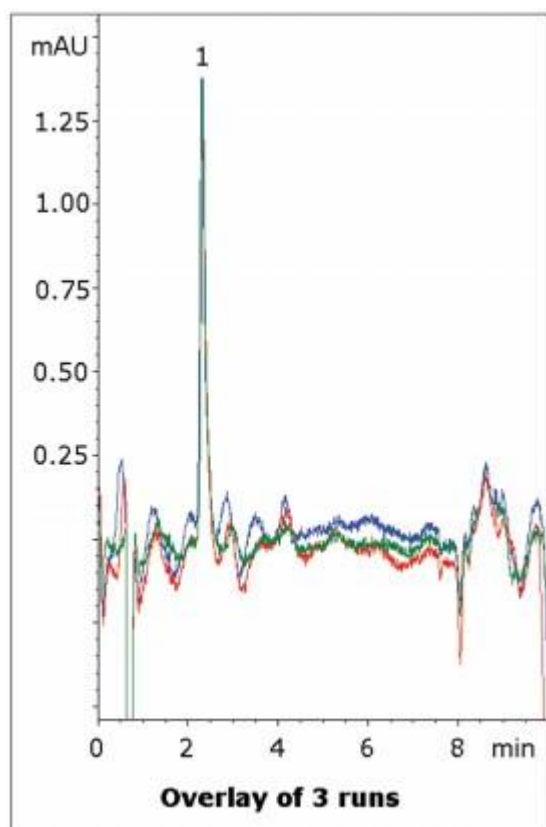


## Metronidazole Topical Cream Analyzed by HPLC - AppNote

### Retention for Highly Polar API

This API has very little Hydrophobic character and is not readily retained by Reversed Phase. The Peak that was obtained had excellent efficiency and symmetry. Three runs are shown in the figure in order to illustrate the repeatability of the data.



### Peak:

Metronidazole

### Method Conditions

**Column:** Cogent Diamond Hydride™, 4µm, 100Å

**Catalog No.:** [70200-05P-2](#)

**Dimensions:** 2.1 x 50mm

**Mobile Phase:**

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

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

**Gradient:**

Time (minutes)	%B
0	95
1.5	95
6	50
7	95

**Post Time:** 5 minutes

**Injection vol.:** 0.2µL

**Flow rate:** 0.3mL / minute

**Detection:** UV @ 254nm

**Sample Preparation:** 250.0mg of 0.75% Metronidazole topical cream was added to a 25mL volumetric flask containing a portion of 50/50 Solvent A / Solvent B diluent. After sonicating 30 minutes, it was diluted to mark. Then a portion was filtered using a 0.45µm Nylon Syringe Filter (MICROSOLV Tech Corp.).

**t<sub>0</sub>:** 0.6 minutes

**Note:** Metronidazole is a Nitroimidazole antibiotic agent. It is marketed under the trade names Flagyl®, Filmet®, and others.



**Attachment**

**No 267 Metronidazole Topical Cream pdf** 0.5 Mb [Download File](#)

Printed from the Chrom Resource Center

Copyright 2025, All Rights Apply

**MicroSolv Technology Corporation**

9158 Industrial Blvd. NE, Leland, NC 28451

Tel: (732) 380-8900

Fax: (910) 769-9435

Email: [customers@mtc-usa.com](mailto:customers@mtc-usa.com)

Website: [www.mtc-usa.com](http://www.mtc-usa.com)