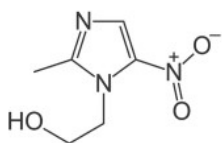
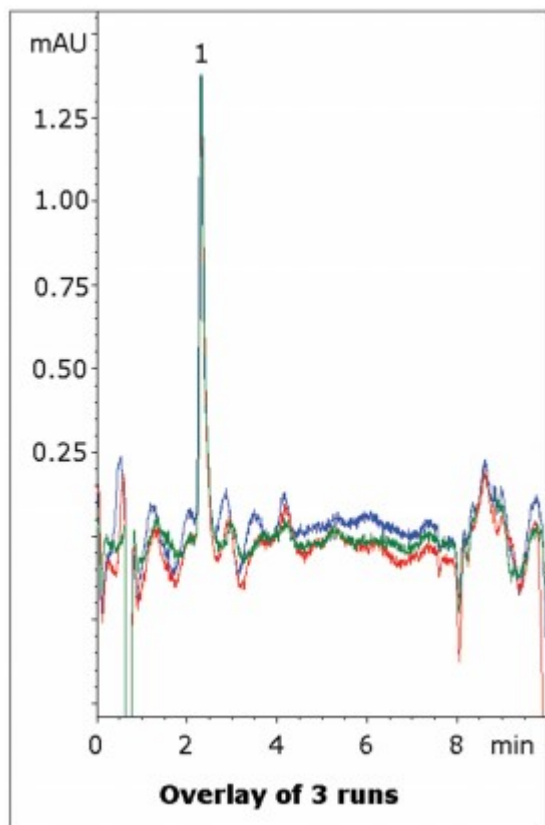


Metronidazole Topical Cream Analyzed by HPLC – AppNote

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.).

t₀: 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](#)