# **HPLC Application**

ID No.: 20631



## **Extraction and Analysis of Metronidazole in Facial Cleansers**

Kinetex® 2.6 µm XB-C18 100 Å, LC Column 50 x 2.1 mm, Ea

50 x 2.1 mm ID **Dimensions:** Order No: 00B-4496-AN **Elution Type:** Gradient

Eluent A: 0.1% Formic Acid

**Eluent B:** MeOH

Gradient	Step No.	Time (min)	Pct A	Pct B
Profile:	1	0	95	5
	2	2	60	40
	3	3	60	40
	4	3.1	95	5
	5	5	95	5

Kinetex<sup>®</sup>

Products used in this application:



Flow Rate: 300 µL/min

Col. Temp.: 25 °C

**Detection:** Mass Spectrometer (MS) @ amu (650 °C)

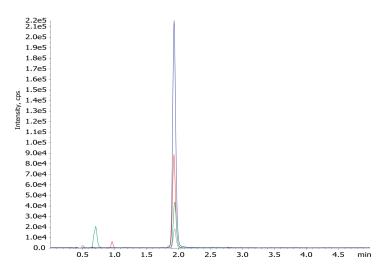
**Detector Info:** <a target="\_blank"

href="https://sciex.com/products/mass-spectrometers?utm\_campaign=2019%20application%20search&utm\_source=phenomenex&utm\_medium=referral">SCIEX<SecurityGuard\*\*\*\*\* ULTRA Guard Cartridge System extends column lifetime. **Analyst Note:** 

- SecurityGuard ULTRA Cartridges, UHPLC C18 for 2.1mm ID Columns, 3/Pk Part No.: AJ0-8782

- Holder Part No.: AJ0-9000

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#### **ANALYTES:**

Metronidazole

Retention Time: 1.94 min

13-C2 15-N-Metronidazole

Retention Time: 1.93 min

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## **Sample Preparation Details**

for HPLC Application ID No.: 20631



### **Extraction and Analysis of Metronidazole in Facial Cleansers**

#### **PRODUCT DESCRIPTION:**

Strata™-X-C 33 µm Polymeric Strong Cation, 30 mg / 3 mL, Tubes , 50/Pk

Order No.: 8B-S029-TBJ

#### **SOLID PHASE EXTRACTION (SPE) PRODCEDURE:**

Note: The solvent volumes shown below are for a 30 mg bed mass.

The solvent volumes will need to be adjusted for a smaller or larger bed mass.

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#### Load:

- 1) Dissolve 0.250g of Neutragena Foaming Face Cleaner With Microclear Technology in 10mLs of 0.1N HCL
- 2) Vortex to achieve homogenous mixture
- 3) Centrifuge for 5 minutes at 5000g
- 4) Load

3mL aliquot of sample

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Dry

5 min under full vacuum

#### Elute:

#### **Final Prep and Analysis:**

Evaporate to dryness at 50 C. Reconstitute in 200 uL of 10:90 MeOH:0.1% Formic Acid Inject:  $10 \mu L$  on HPLC Mass Spectrometer (MS) @ amu (650°C)

ANALYTES:	Spiked Conc. (ng/mL)	Log P	pKa	% Rec	%RSC (n=0)
1 Metronidazole	100				
2 13-C2 15-N-Metronidazole	1000				

**Note:** This method is designed as a convenient starting point for further investigation and can be tailored to meet your extraction goals. Call your local Phenomenex Representative for assistance in method development and optimization techniques.

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