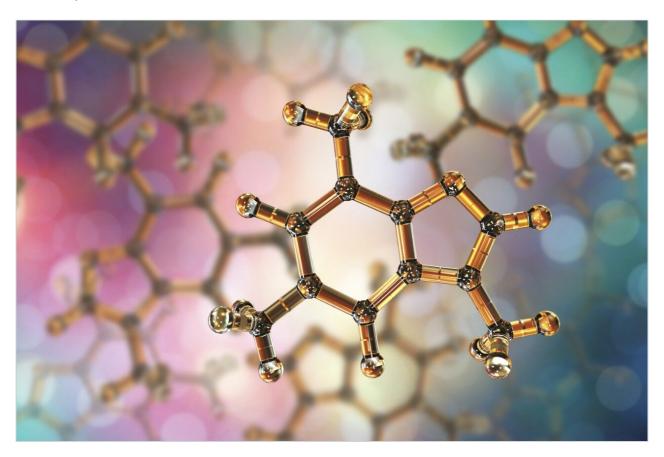
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Application Note

Caffeine Metabolites- pH 2.45

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This is an Application Brief and does not contain a detailed Experimental section.

Abstract

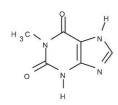
This application brief highlights the analysis of caffeine metabolites using XTerra Phenyl Columns.

Introduction

The compounds analyzed in this study are:

- 1. 1-Methylxanthine
- 2. 1, 3-Dimethyluric acid
- 3. Theobromine
- 4. 1, 7-Dimethyluric acid
- 5. 1, 7-Dimethylxathine
- 6. Caffeine

Caffeine



1-Methylxanthine

1, 7-Dimethylxathine

Theobromine

1, 3-Dimethyluric acid

1, 7-Dimethyluric acid

Experimental

Conditions

Column: XTerra Phenyl, 4.6 x 150 mm, 5 µm

Part number: 186001146

Mobile phase A: H_2O

Mobile phase B: ACN

Mobile phase C: 50 mM NH₄HCO₃, pH 2.45

Flow rate: 2.0 mL/min

Injection volume: $10 \mu L$

Temperature: 30 °C

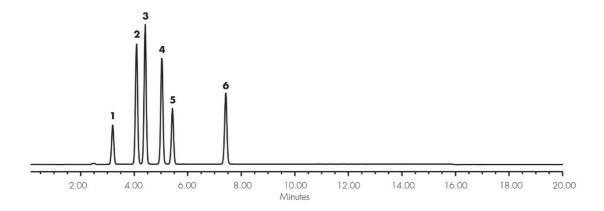
Detection: UV @ 280 nm

Instrument: Alliance 2695, 2996 PDA

Gradient

Time (min)	Profile		
	%A	%B	%C
0.0	90	0	10
15.0	70	20	10

Results and Discussion



Featured Products

Alliance HPLC System https://www.waters.com/534293

2998 Photodiode Array (PDA) Detector https://www.waters.com/1001362

WA20738.020, June 2002

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