

Analysis of Analgesics Using Atlantis T3

Waters Corporation



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

Abstract

This application brief highlights the analysis of analgesics.

Introduction

Compounds analysed in this application brief :

1. Acetaminophen
2. Caffeine
3. 2-Acetamidophenol
4. Acetanilide
5. Acetylsalicylic acid
6. Phenacetin

Experimental

Test Conditions

Column: Atlantis T3, 4.6 x 150 mm, 5 µm

Part Number: 186003747

Mobile Phase A: H₂O

Mobile Phase B: ACN

Mobile Phase C: 1% HCOOH in H₂O, pH 2.3

Flow Rate: 1.0 mL/min

Injection Volume: 10 µL

Sample: Acetaminophen (20 µg/mL),
Caffeine (20 µg/mL), 2-
Acetamidophenol (50 µg/mL),
Acetanilide (20 µg/mL),
Acetylsalicylic acid (50 µg/mL),
Phenacetin (20 µg/mL) in H₂O

Column Temperature: 30 °C

Sample Temperature: 15 °C

Detection: UV @ 260 nm

Sampling Rate: 5 point/sec

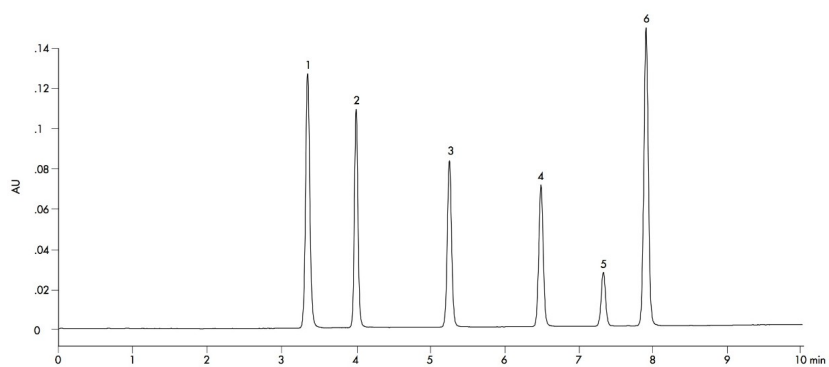
Filter Response: 0.2

Instrument: Waters Alliance 2695 with
2996 PDA

Gradient

Time (min)	Profile		
	%A	%B	%C
0.00	75	15	10
10.00	30	60	10
11.00	75	15	10
15.00	75	15	10

Results and Discussion



1. Acetaminophen, 2. Caffeine, 3. 2-Acetamidophenol, 4. Acetanilide, 5.

Acetylsalicylic acid, 6. Phenacetin

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WA60217, January 2009

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