

Note d'application

# Theophylline and Related Compounds

Waters Corporation



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

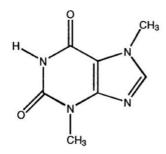
#### Abstract

This application brief highlights the analysis of theophylline and related compounds using Symmetry Shield RP<sub>18</sub> Columns.

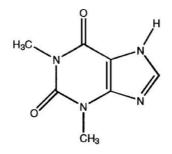
### Introduction

The compounds analyzed in this study are:

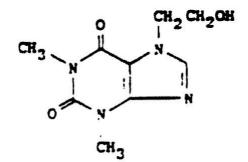
- 1. Theobromine
- 2. Theophylline
- 3. 7-(2-hydroxyethyl) Theophylline



1. Theobromine



2. Theophylline



3. 7-(2-hydroxyethyl) Theophylline

#### Experimental

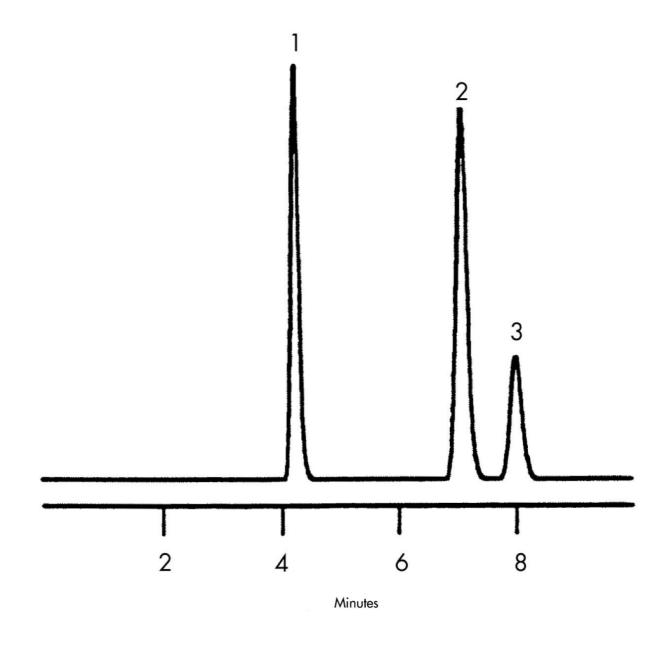
#### HPLC Method

Column:

Symmetry Shield RP\_{18}, 3.0 x 150 mm, 5  $\mu\text{m}$ 

Part number:	186000692
Mobile phase:	5 mM potassium phosphate, pH 2.0/acetonitrile 95:5
Flow rate:	0.6 mL/min
Injection volume:	5 μL injection of solution containing theobromine (0.22 mg/mL), theophylline (0.26 mg/mL), and 7-(2-hydroxyethyl) theophylline (0.13 mg/mL)
Detection:	UV @ 270 nm

Results and Discussion



## Featured Products

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