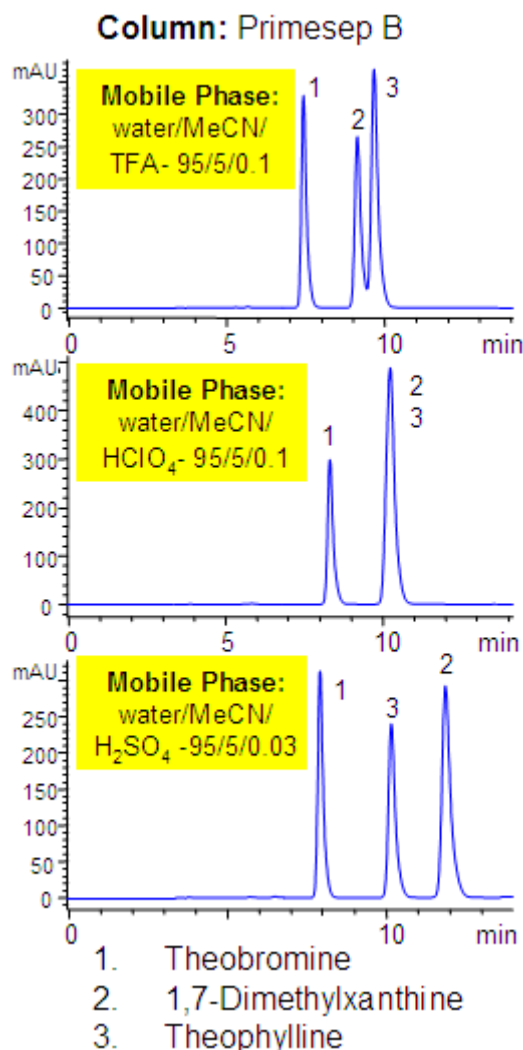


# Effect of Acid on Separation of Xanthines

<https://sielc.com/Application-Effect-of-Acid-on-Separation-of-Xanthines>

## Chromatogram



## Description

Primesep B separates xanthines such as theobromine, dimethylxanthine, theophylline by a combination of reversed-phase and ion-exchange mechanisms. The anion-exchange properties of the column allow retention of hydrophilic xanthines, and the reversed-phase properties retain hydrophobic compounds. The HPLC separation uses a mobile phase of water, acetonitrile (MeCN, ACN) and either trifluoroacetic acid (TFA), perchloric acid (HClO<sub>4</sub>), or sulfuric acid (H<sub>2</sub>SO<sub>4</sub>) and UV detection.

## Method Parameters

<b>Mobile Phase</b>	MeCN/H <sub>2</sub> O
<b>Buffer</b>	TFA , HClO <sub>4</sub> , H <sub>2</sub> SO <sub>4</sub>
<b>Flow Rate</b>	1.0 ml/min
<b>Class of Compounds</b>	Drug, Acid, Hydrophilic, Ionizable, Hormone
<b>Analyzing Compounds</b>	Theobromine, 1,7 – Dimethylxanthine, Theophylline

## HPLC Column Used

### **Primesep B**

[Order this column at hplc-shop.de](http://hplc-shop.de) →