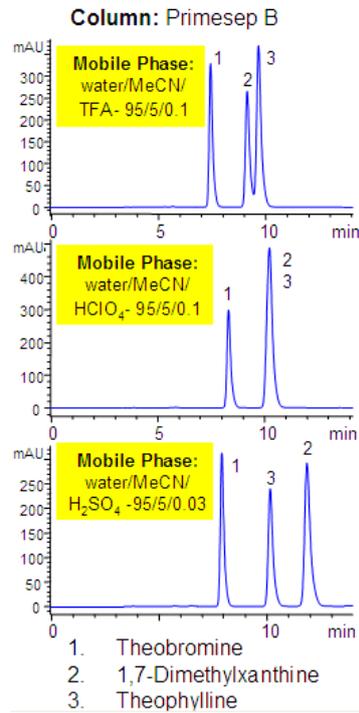


Effect of Acid on Separation of Xanthines



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 (HClO₄), or sulfuric acid (H₂SO₄) and UV detection.

Method Parameters

Column	Primesep B
Mobile Phase	MeCN/H ₂ O
Buffer	TFA , HClO ₄ , H ₂ SO ₄
Flow Rate	1.0 mL/min
Detection	UV Detection

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