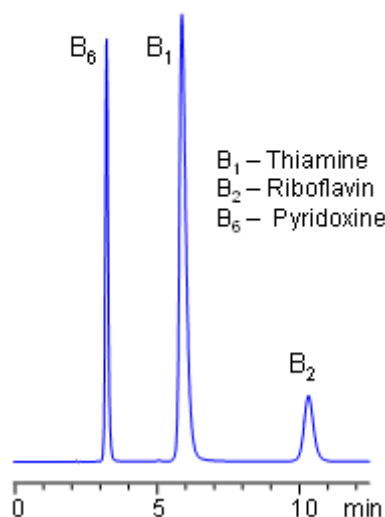


HPLC Separation of Vitamin B

<https://sielc.com/Application-HPLC-Separation-of-Vitamin-B>

Chromatogram

Column: Primesep C
150 x 4.6 mm
Flow rate: 1.0 mL/min.
Detection: UV 280 nm
Mobile Phase: MeCN/Water-
10/90 with $\text{NEt}_3\text{H}_3\text{PO}_4$ buffer
pH 3.0 20 mMol



Description

Primesep C separates B vitamins with baseline resolution by a combination of cation exchange, complex formation, and hydrophobic interactions. Vitamin B1 (thiamine), vitamin B2 (riboflavin), and vitamin B6 (pyridoxine) are separated with a mobile phase of water, acetonitrile (MeCN, ACN) and triethylamine (TEA) phosphate with UV detection at 280 nm.

Method Parameters

Mobile Phase	MeCN/H ₂ O -10/90%
Buffer	NEt ₃ H ₃ PO ₄ Ph 3.0 – 20 Mm
Flow Rate	1.0 ml/min
Detection	UV, 280 nm
Class of Compounds	Drug, Vitamin B \blacksquare , Hydrophobic, Ionizable
Analyzing Compounds	Pyridoxine, Thiamine, Riboflavin

HPLC Column Used

Primesep C , 4.6x150 mm, 5 μ m, 100A

[Order this column at hplc-shop.de →](#)