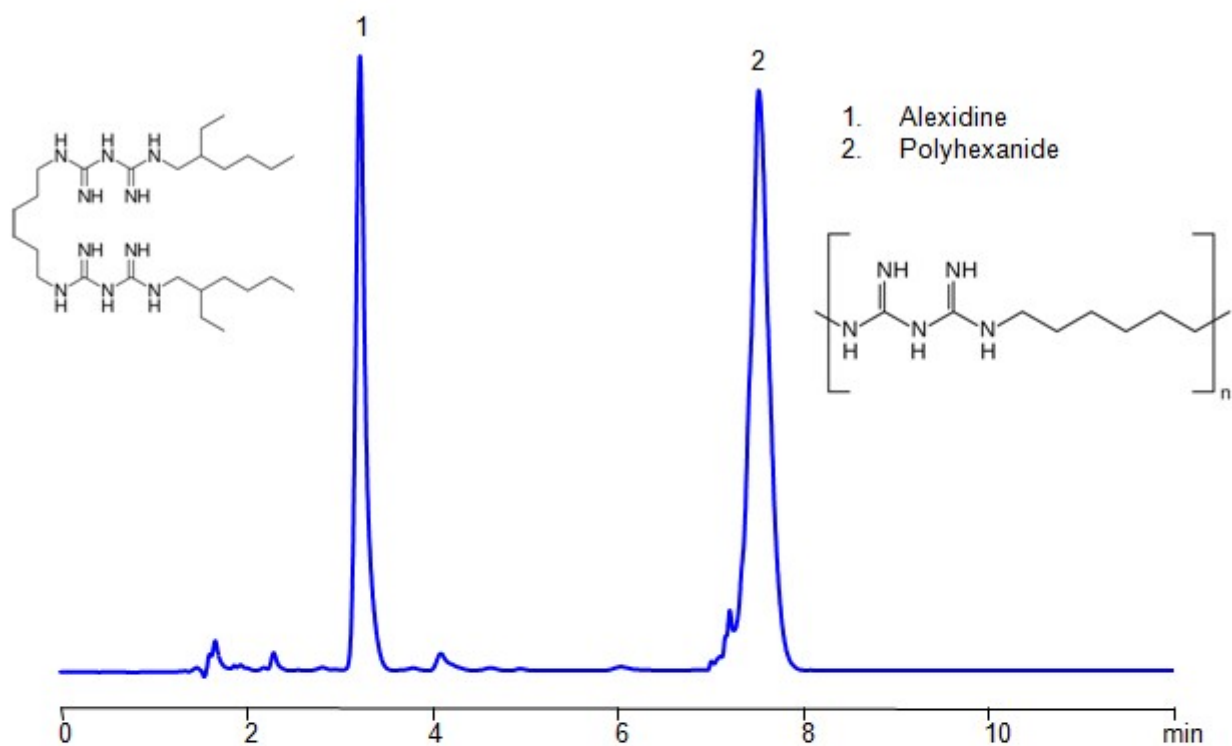


HPLC Method for Separation Alexidine and Polyhexanide on BIST B+ Column

<https://sielc.com/hplc-determination-of-alexidine-polyhexanide>

Chromatogram



Column:	BIST B+
Column size:	4.6 × 150 mm, 5 µm
Column part number:	TBP-46.150.0510
Mobile phase:	Step Gradient A: MeCN - 75%, H ₂ SO ₄ - 0.1% / 3 min B: MeCN - 0%, H ₂ SO ₄ - 0.1% / 6 min
Flow rate:	1.0 mL/min
Detection:	UV 200 nm
Injection volume:	10 µL
Sample:	1. 0.14 mg/ml 2. 0.26 mg/ml
Diluent:	MeCN/H ₂ O – 80/20%
LOD:	1. 8 ppb 2. 10 ppb

Description

· HPLC Method for Analysis of Polyhexanide PHMB , Alexidine on on BIST B+ by SIELC Technologies

Alexidine is a chemical compound that belongs to the class of bis-biguanide antiseptics and has the chemical formula C₂₆ H₅₆ N₁₀ . It is known for its antimicrobial properties and is used in various products for disinfection and antiseptic purposes.

Alexidine has broad-spectrum antimicrobial activity, and it is commonly used in healthcare settings for its effectiveness against bacteria, fungi, and some viruses. In some formulations, alexidine is used as a topical antiseptic to disinfect skin and mucous membranes. It is found in some mouthwashes, oral care products, contact lens solutions, and more It may be included in certain

wound care products for its ability to prevent infection. You can find detailed UV spectra of Alexidine and information about its various lambda maxima by visiting the following link.

Polyhexanide (polyhexamethylene biguanide , PHMB) is a disinfectant with the chemical formula $(C_8H_{17}N_5)_n$. It has multiple industrial, medical, biological and research applications especially for materials that could be a possible source of bacterial contamination. Dermatologically, it is sold as polyhexanide. From 2011, it has been classified as a category 2 carcinogen. You can find detailed UV spectra of Polyhexanide PHMB and information about its various lambda maxima by visiting the following link.

Polyhexanide PHMB , Alexidine can be retained, separated and analyzed on a BIST B+ mixed-mode stationary phase column using an analytical method with a simple mobile phase of water, Acetonitrile (MeCN) , and a sulfuric acid as a buffer. This analysis method can be detected using UV at 200 nm.

Method Parameters

Mobile Phase*	Step GradientA: MeCN – 75%, H ₂ SO ₄ – 0.1% / 3 minB: MeCN – 0%, H ₂ SO ₄ – 0.1% / 6 min
Buffer	H ₂ SO ₄ -0.1%
Flow Rate	1.0 ml/min
Detection	UV 200 nm
Sample	1. 0.14 mg/ml2. 0.26 mg/ml
LOD**	8 ppb, 10 ppb
Injection volume	10 µl
Class of Compounds	Bis-biguanide
Analyzing Compounds	Polyhexanide PHMB,Alexidine

HPLC Column Used

BIST B+, 4.6 x 150 mm, 5 µm, 100 Å, dual ended

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