

<https://sielc.com/hplc-method-of-chlorhexidine-in-plasma>

Chlorhexidine

Blood plasma

Urine

0 1 2 3 4 5 6 7 8 9 min

Column:	BIST B+
Column size:	4.6 × 150 mm, 5 µm
Column part number:	TBP-46.150.0510
Mobile phase:	Gradient MeCN – 80-60%, 10 min
Buffer:	H ₂ SO ₄ - 0.2%
Flow rate:	1.0 mL/min
Detection:	UV 260 nm
Injection volume:	25 µL
Sample:	0.002 mg/mL Chlorhexidine in sample
LOD:	50 ppb

· HPLC Method for Analysis of Chlorhexidine on BIST B+ by SIELC Technologies .

AugustaChrom – Dr. Roland Kießwetter · Langemarckstr. 21c · 86368 Gersthofen · Tel: 0821 599 783 70 · Fax: 0821 599 783 71 · info@hplc-shop.de · hplc-shop.de

of the most common side effects is tooth discoloration. You can find detailed UV spectra of Chlorhexidine and information about its various lambda maxima by visiting the following link.

Typical HPLC methods used to analyze this product are done in reverse phase (RP) mode, but this is complicated by the presence of two basic groups which, with the overall hydrophobic characteristics of the molecule, usually produce asymmetrical peaks.

Chlorhexidine can be retained and analyzed using the BIST B+ stationary phase column. The analysis utilizes an isocratic method with a simple mobile phase consisting of water and acetonitrile (MeCN) with a sulfuric acid buffer. Detection is performed using UV.

Method Parameters

Mobile Phase	MeCN
Buffer	H2SO4 – 0.2%
Flow Rate	1.0 ml/min
Detection	UV 260 nm
Peak Retention Time	6.2 min
Class of Compounds	Topical antiseptic
Analyzing Compounds	Chlorhexidine

HPLC Column Used

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

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