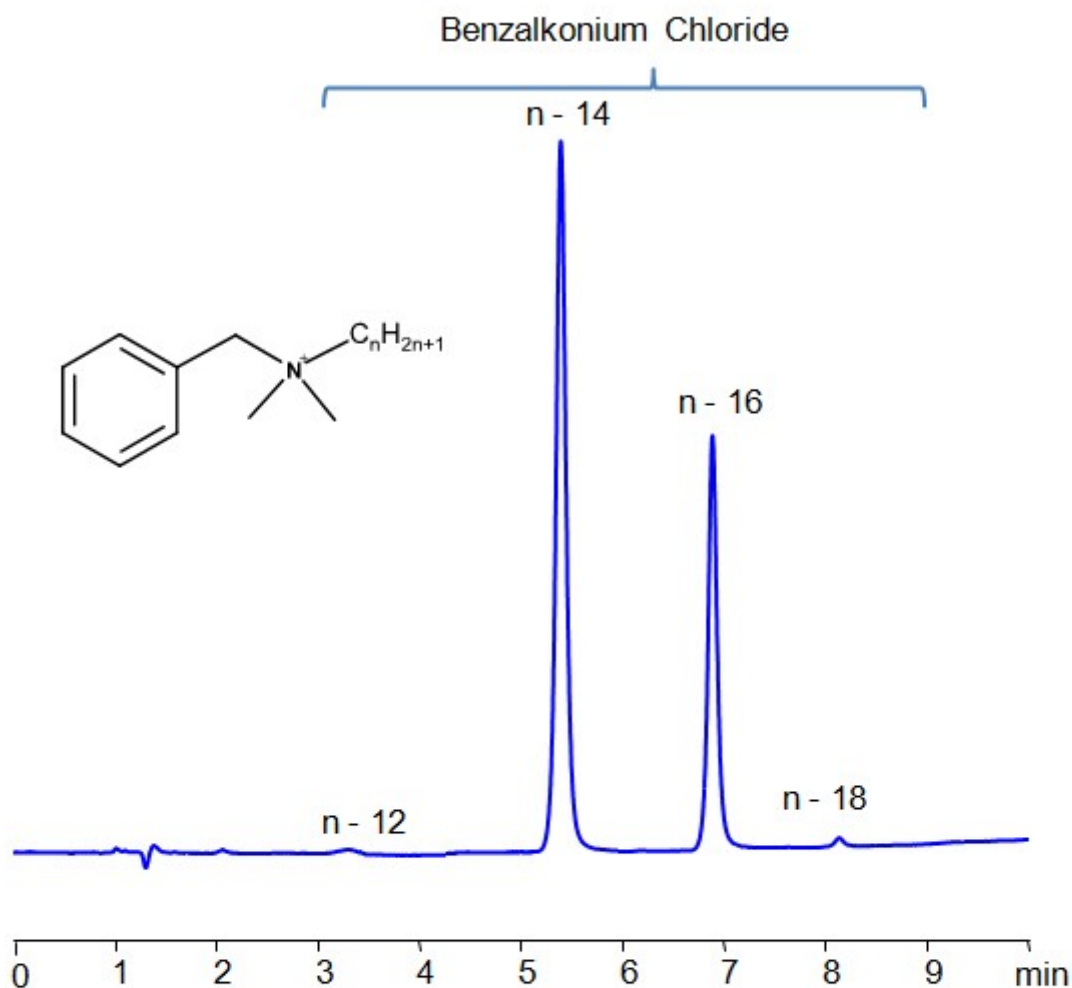


# HPLC Method for Analysis of Benzalkonium Chloride on Primesep SB Column

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

## Chromatogram



|                            |                                       |
|----------------------------|---------------------------------------|
| <b>Column:</b>             | Primesep SB                           |
| <b>Column size:</b>        | 3.2 × 100 mm, 5 μm                    |
| <b>Column part number:</b> | SB-32.100.0510                        |
| <b>Mobile phase:</b>       | Gradient MeCN – 30-70%, 10 min        |
| <b>Buffer:</b>             | H <sub>2</sub> SO <sub>4</sub> - 0.2% |
| <b>Flow rate:</b>          | 0.5 mL/min                            |
| <b>Detection:</b>          | UV 210 nm                             |

## Description

· Separation type: Liquid Chromatography Mixed-mode · Method for Analysis of Benzalkonium chloride on Primesep SB by SIELC Technologies

Benzalkonium chloride, also known as Zephiran or Alkyldimethylbenzylammonium chloride, is a positively charged surfactant often used as a pharmaceutical preservative and as an antiseptic. Benzalkonium Chloride can be retained on a mixed-mode stationary phase Primesep SB column with embedded strong basic ion-pairing groups, using a gradient analytical method with a simple mobile phase of water, Acetonitrile (MeCN), and a Sulfuric acid (H<sub>2</sub>SO<sub>4</sub>) ionic modifier. This analysis method can be UV detected at 210 nm with high resolution and peak symmetry.

#### Method Parameters

|                            |                                       |
|----------------------------|---------------------------------------|
| <b>Mobile Phase</b>        | Gradient MeCN – 30-70%, 10 min        |
| <b>Buffer</b>              | H <sub>2</sub> SO <sub>4</sub> – 0.2% |
| <b>Flow Rate</b>           | 0.5 ml/min                            |
| <b>Detection</b>           | UV 210 nm                             |
| <b>Peak Retention Time</b> | 5.32, 6.93                            |
| <b>Class of Compounds</b>  | Drug                                  |
| <b>Analyzing Compounds</b> | Benzalkonium chloride                 |

#### HPLC Column Used

**Primesep SB, 3.2 x 100 mm, 5 µm, 100 A, dual ended**

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