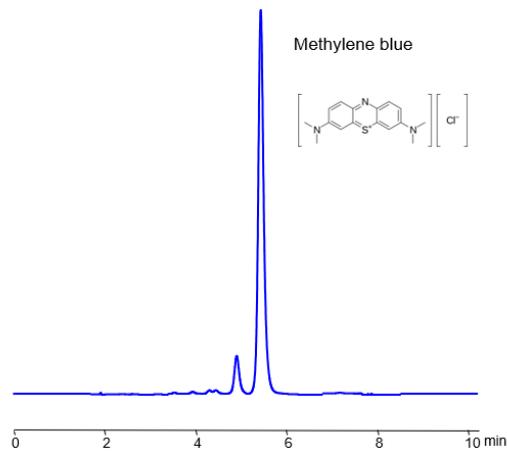


## HPLC Method for Analysis of Methylene blue on Primesep 100 Column



<b>Column:</b>	Primesep 100
<b>Column size:</b>	4.6 × 150 mm, 5 µm
<b>Column part number:</b>	100-46.150.0510
<b>Mobile phase:</b>	MeCN/H <sub>2</sub> O – 80/20%
<b>Buffer:</b>	H <sub>2</sub> SO <sub>4</sub> - 0.2%
<b>Flow rate:</b>	1.0 mL/min
<b>Detection:</b>	UV 600 nm

Methylene blue is a synthetic dye with the chemical formula C<sub>16</sub>H<sub>18</sub>ClN<sub>3</sub>S. As a salt, it has medical uses, primarily in treatment of methemoglobinemia. It is also used to treat pain caused by the urinary tract infections and spasms as a combination drug–Methylphen. Commercially, it is often used as a blue dye, though it has a wide variety of other uses including but not limited to sulfide analysis, water testing, and redox indicator. You can find detailed UV spectra of Methylene Blue and information about its various lambda maxima by visiting the following link.

Methylene Blue can be retained and analyzed on a Primesep 100 mixed-mode stationary phase column using an isocratic analytical method with a simple isocratic mobile phase of water, Acetonitrile (MeCN), and a sulfuric acid (H<sub>2</sub>SO<sub>4</sub>) buffer. This analysis method can be UV detected at 600 nm with high resolution and peak symmetry.

### Method Parameters

<b>Column</b>	Primesep 100, 4.6 x 150 mm, 5 µm, 100 Å, dual ended
<b>Mobile Phase</b>	MeCN/H <sub>2</sub> O – 80/20%
<b>Buffer</b>	H <sub>3</sub> PO <sub>4</sub> – 0.2%
<b>Flow Rate</b>	1.0 mL/min
<b>Detection</b>	UV, 600 nm

Quelle: <https://sielc.com/hplc-determination-of-methylene-blue>