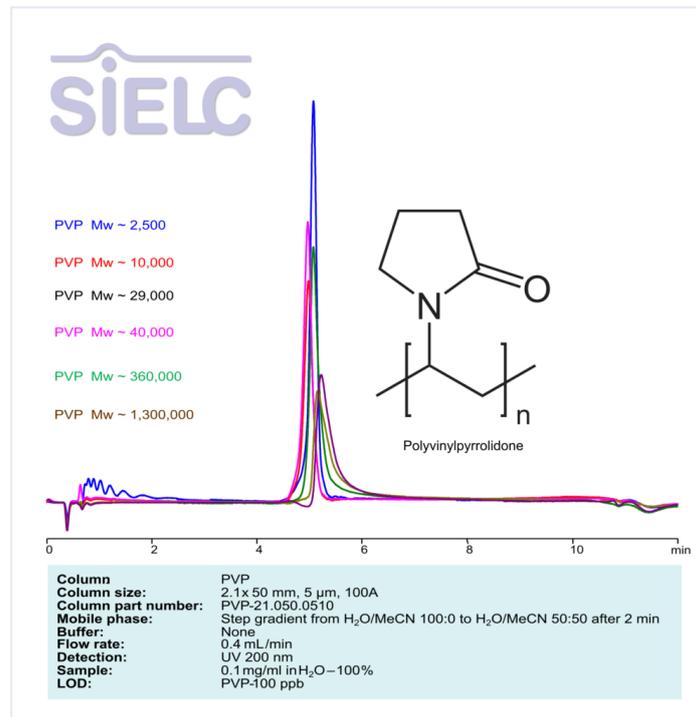


HPLC Method for Analysis of Polyvinylpyrrolidone(PVP) on PVP Column



High Performance Liquid Chromatography (HPLC) Method for Analysis of PVP

Polyvinylpyrrolidone (PVP)

Polyvinylpyrrolidone (PVP) is a versatile synthetic polymer widely used in life sciences and biochemical research. As a water-soluble compound, it performs multiple critical functions, including:

Its role as a protective colloid is especially important for stabilizing proteins, enzymes, and other sensitive biological molecules. This makes PVP particularly well-suited for forming stable complexes with iodine in pharmaceutical and medical formulations.

[compound] can be retained and analyzed using the PVP column. The analysis utilizes a step gradient method with a simple mobile phase consisting of water and acetonitrile (MeCN). Detection is performed using UV at 200 nm. The signal from the blank injection was subtracted from all sample chromatograms to correct for background noise and baseline drift.

Method Parameters

Column	PVP, 2.1 x 50 mm, 5 µm, 100 Å, dual ended
Mobile Phase	Step gradient from H ₂ O/MeCN (100:0) to H ₂ O/MeCN (50:50) after 2 minutes
Buffer	None
Flow Rate	0.4 mL/min
Detection	UV at 200 nm
Limit of Detection	PVP – 100 ppb

Quelle: <https://sielc.com/hplc-method-for-analysis-of-polyvinylpyrrolidonepvp>