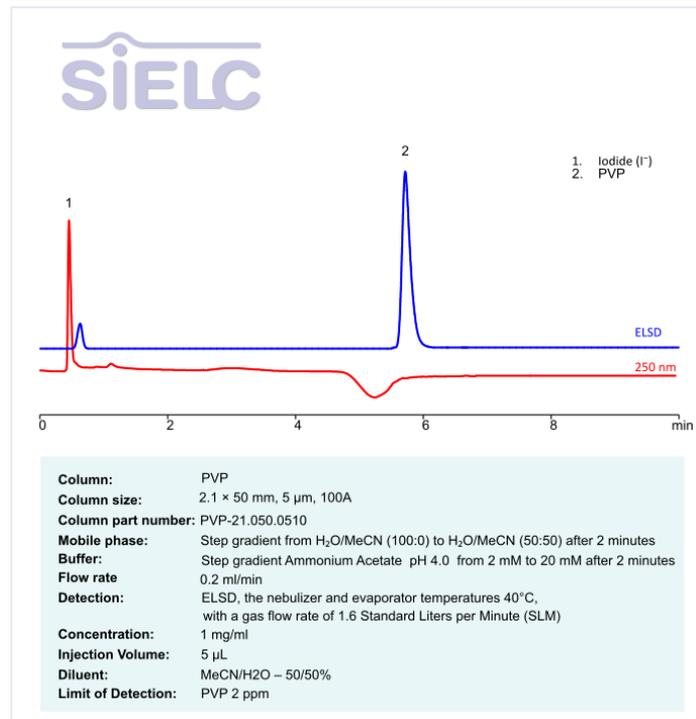


HPLC Method for Separation Povidone-iodine (PVP-I) on PVP Column



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

Povidone Iodide (Povidone-Iodine / PVP-I) Povidone Iodide, also known as Povidone-Iodine (PVP-I), is a widely used antiseptic made from iodine and polyvinylpyrrolidone (PVP). This combination allows for a slow, sustained release of iodine, enhancing antimicrobial effects while reducing irritation.

PVP (Polyvinylpyrrolidone): A water-soluble synthetic polymer that acts as:

It helps form a stable complex with iodine, improving its medical use.

Iodine: The active antimicrobial agent, effective against:

Slow release from the PVP complex ensures long-lasting, gentle antiseptic action.

Iodide , PVP can be retained and analyzed using the PVP column. The analysis utilizes an step gradient method with a simple mobile phase consisting of water, acetonitrile (MeCN), and ammonium acetate.

Detection is performed using ELSD.

Method Parameters

Mobile Phase	Step gradient MeCN/H ₂ O
Buffer	Ammonium Acetate pH 4.0 – 20 mM
Flow Rate	0.4 mL/min
Detection	ELSD
Limit of Detection	PVP2ppm

Quelle: <https://sielc.com/hplc-method-povidone-iodine>