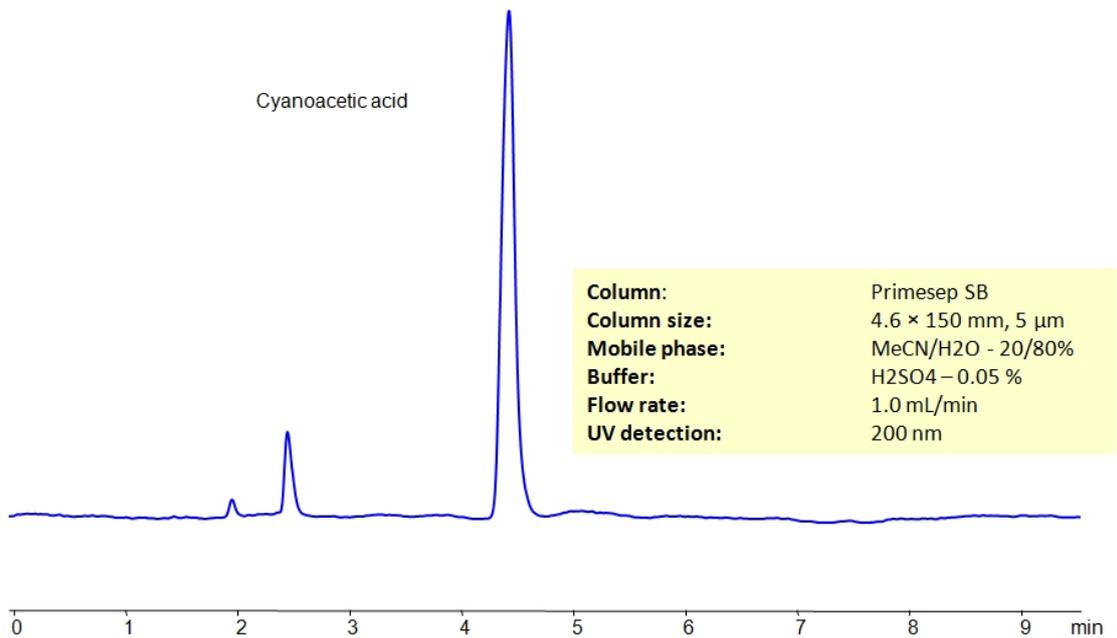


HPLC Determination of Cyanoacetic Acid on Primesep SB Column



High Performance Liquid Chromatography (HPLC) Method for Analysis of Cyanoacetic acid

Cyanoacetic Acid is an organic acid with the chemical formula C₃H₃NO₂. It is used in a variety of syntheses as an intermediate including but not limited to vitamin B₆, caffeine, herbicides, pesticides, dyes, and polymers. When heated up, it undergoes decarboxylation to produce acetonitrile.

Cyanoacetic acid can be retained and analyzed using the Primesep SB 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

Column	Primesep SB, 4.6 x 150 mm, 5 µm, 100 Å, dual ended
Mobile Phase	MeCN/H ₂ O – 20/80%
Buffer	H ₂ SO ₄ – 0.05%
Flow Rate	1.0 mL/min
Detection	UV, 200 nm

Quelle: <https://sielc.com/hplc-determination-of-cyanoacetic-acid>