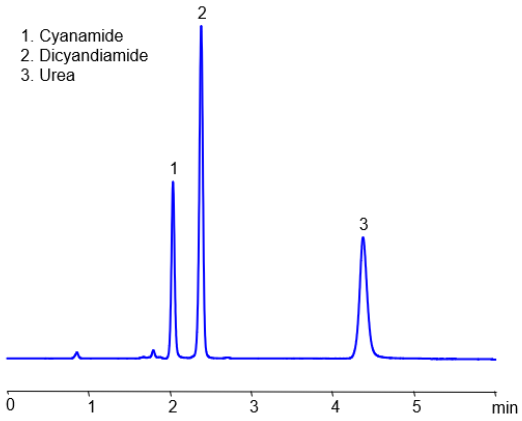
HPLC Method for Analysis of Cyanamide, Dicyandiamide and Urea on Primesep S Column



Column:	Primesep S
Part #:	S-46.150.0510
Column size:	4.6 × 150 mm, 5 µm 100A
Mobile phase:	MeCN/H2O – 90/10%
Buffer:	None
Flow rate:	1.0 mL/min
Detection:	UV 200 nm

Separation type: Bridge Ion Separation Technology, or BIST™ by SIELC Technologies

Cyanamide (H2CN2) is a highly reactive and toxic compound used in the production of fertilizers, pharmaceuticals, and other chemicals. It can be used as a soil fumigant to control pests and weeds.

Dicyandiamide (C2H4N4) is a white crystalline solid that is often used as a slow-release fertilizer. It is also used in the production of pharmaceuticals, dyes, and resins. Dicyandiamide can also be used as a nitrification inhibitor in agriculture to reduce the loss of nitrogen from the soil.

Urea (CO(NH2)2) is a white crystalline solid that is widely used as a fertilizer due to its high nitrogen content. It is also used in the production of plastics, resins, and adhesives. Urea is also used in the manufacturing of animal feed, and as a raw material in the production of many industrial chemicals. In addition, it is also used as a component in certain skin creams and cosmetics due to its moisturizing properties.

Using a Primesep S normal-phase column and a mobile phase consisting of water and Acetonitrile (MeCN) with no buffer, Cyanamide, Dicyandiamide and Urea can be retained, separated, and analyzed. This analysis method can be UV detected at 200 nm.

Method Parameters

Column	Primesep S, 4.6 x 150 mm, 5 µm, 100 Å, dual ended
Mobile Phase	MeCN – 90%
Buffer	No
Flow Rate	1.0 mL/min
Detection	UV 200 nm

Quelle: https://sielc.com/hplc-method-for-analysis-of-cyanamide