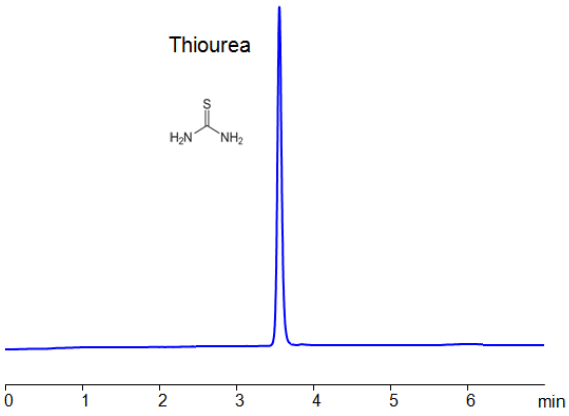
HPLC Method for Analysis of Thiourea on Primesep P Column



Column:	Primesep P
Column size:	4.6 × 250 mm, 5 µm
Column part number:	P-46.250.0510
Mobile phase:	MeCN/H_2O – 5/95%
Buffer:	None
Flow rate:	1.0 mL/min
Detection:	UV 200 nm

Separation type: Liquid Chromatography Mixed-mode

Thiourea is a versatile chemical compound with the formula (NH2)2CS. It is structurally similar to urea, except that the oxygen atom is replaced by a sulfur atom. It is a white crystalline solid when pure.

Thiourea is used in a variety of applications. It is a reagent in organic synthesis, often used in the toning of silver-gelatin photography prints, as a component of hair preparations and bleaches, and as a radioprotective agent in cancer therapy.

In agriculture, thiourea is used as a soil treatment agent to promote germination and stimulate flowering and fruiting.

Using a Primesep P Mixed-mode phase column and a mobile phase consisting of water and Acetonitrile (MeCN) with no buffer, thiourea can be retained and analyzed. This analysis method can be UV detected at 200 nm.

LOD was determined for this combination of instrument, method, and analyte, and it can vary from one laboratory to another even when the same general type of analysis is being performed.

AugustaChrom - Dr. Roland Kießwetter
Tel.: +49 821 599 783 70
Fax: +49 821 599 783 71
E-Mail: info@hplc-shop.de

Method Parameters

Column	Primesep P, 4.6 x 250 mm, 5 µm, 100 Å, dual ended
Mobile Phase	MeCN/H2O – 5/95%
Buffer	None
Flow Rate	1.0 mL/min
Detection	UV 200 nm
Limit of Detection	UV 1 ppb
Injection Volume	1 µl

Quelle: https://sielc.com/hplc-method-of-thiourea