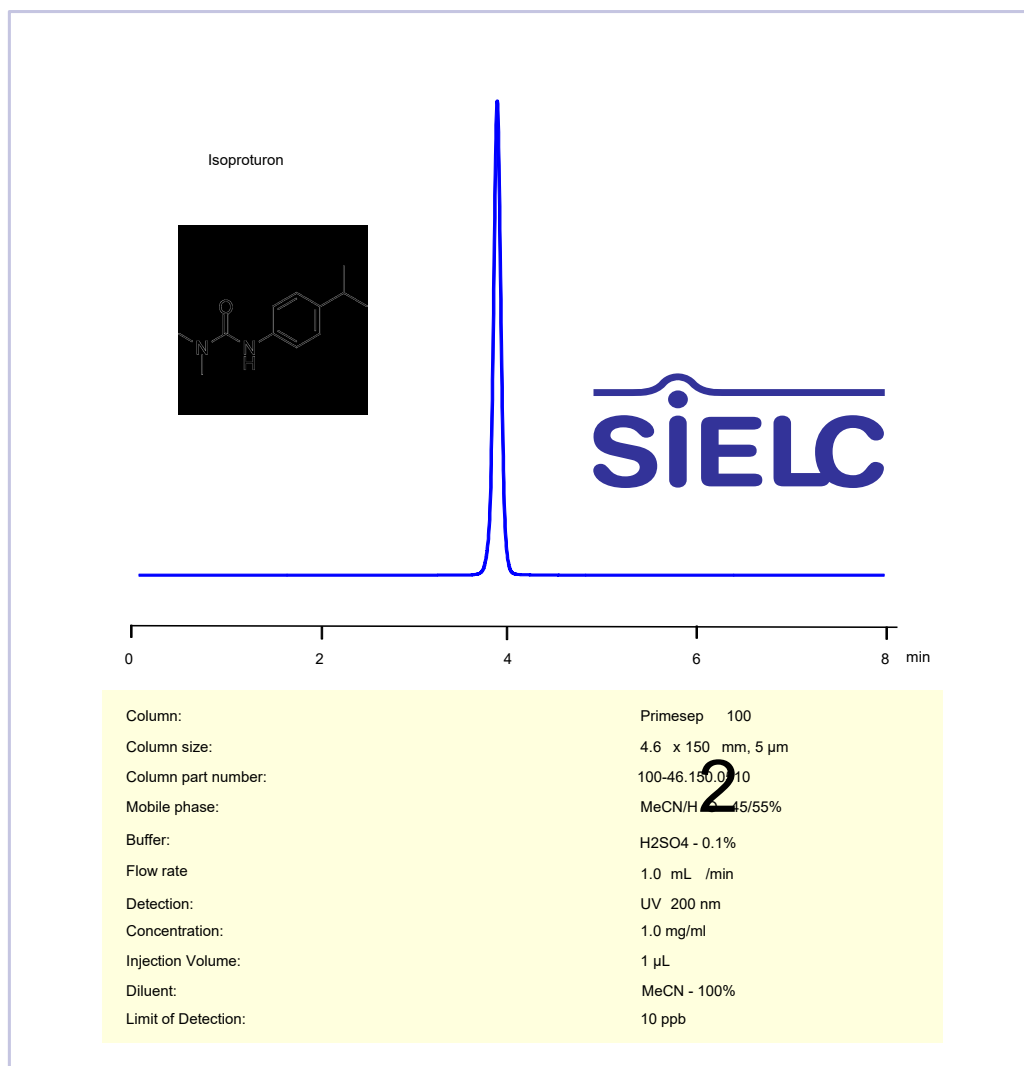


HPLC Method for Analysis of Isoproturon on Primesep 100 Column

<https://sielc.com/hplc-method-isoproturon>

Chromatogram



Description

· Separation type: Liquid Chromatography Mixed-mode SIELC Technologies · HPLC Method for Analysis of Isoproturon on Primesep 100 Column

Isoproturon is classified as a phenylurea herbicide . It is used primarily for controlling annual grasses and broadleaf weeds in cereal crops such as wheat and barley. Isoproturon works by inhibiting photosynthesis in the targeted plants, which eventually leads to their death. It is absorbed by the roots and shoots of the plants and is most effective when applied before or during the early stages of weed growth.

Isoproturon can be retained, separated and analyzed using a Primesep 100 mixed-mode stationary phase column. The analysis employs an isocratic method with a simple mobile phase comprising water, acetonitrile (MeCN), and sulfuric acid as a buffer. This method allows for detection using UV 200 nm.

You can find detailed UV spectra of Isoproturon and information about its various lambda maxima by visiting the following link .

Method Parameters

Mobile Phase

MeCN – 45%

Buffer	H2SO4 -0.1%
Flow Rate	1.0 ml/min
Detection	UV 250 nm
Samples	1.0 mg/ml in MeCN – 100%
Injection volume	1 µl
LOD*	10 ppb (250 nm)
Class of Compounds	phenylurea herbicide
Analyzing Compounds	Isoproturon

HPLC Column Used

Primesep 100, 4.6 x 150 mm, 5 µm, 100 A, dual ended

[Order this column at hplc-shop.de →](https://www.hplc-shop.de)