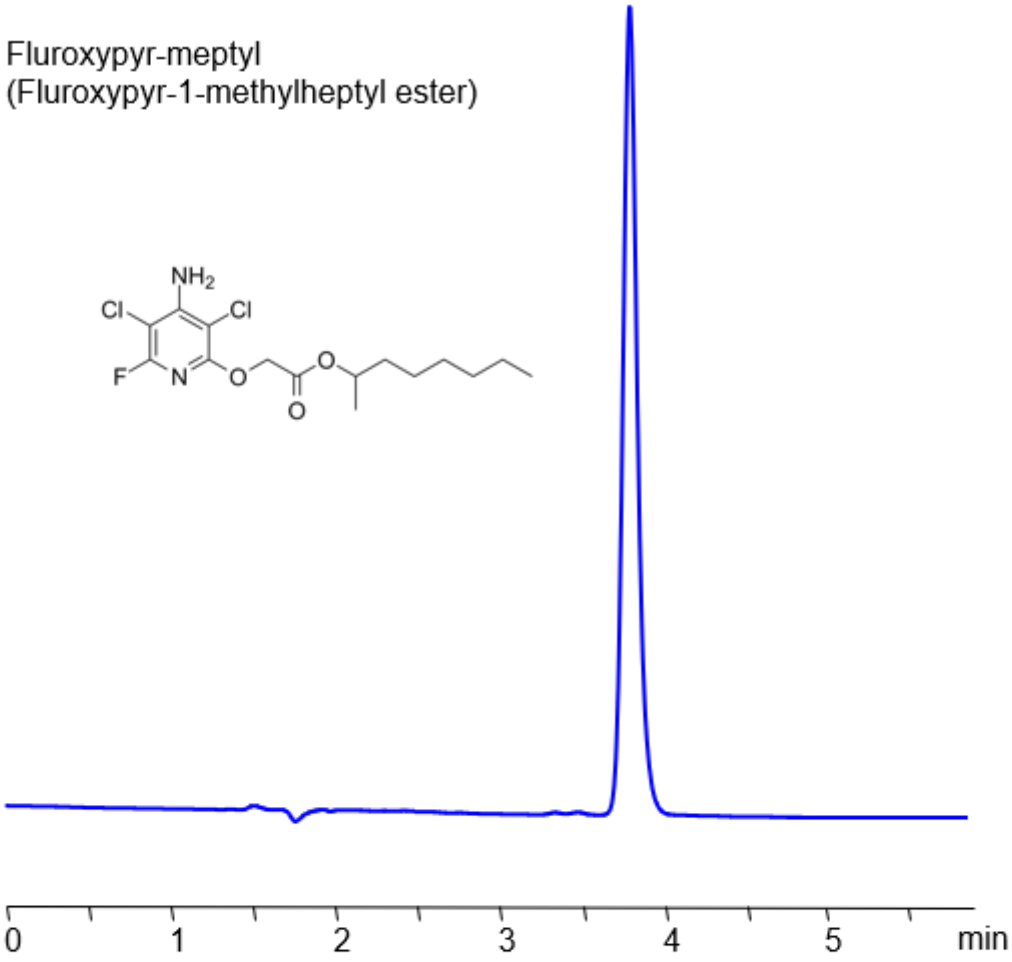
HPLC Method for Analysis of Fluroxypyr-meptyl on Primesep 100 Column

https://sielc.com/hplc-separation-of-fluroxypyr-meptyl

Chromatogram



Column:	Primesep 100
Column size:	4.6 × 150 mm, 5 µm
Column part number:	100-46.150.0510
Mobile phase:	MeCN/H_2O – 70/30%
Buffer:	H_2SO_4 - 0.2%
Flow rate:	1.0 mL/min
Detection:	UV 220 nm

Description

· High Performance Liquid Chromatography (HPLC) Method for Analysis of Fluroxypyr-meptyl .

Fluroxypyr-Meptyl is a herbicide with the chemical formula C 15 H 21 Cl 2 FN 2 O 3 . It is used for the control of broad-leaved weeds in cereals, pastures, and non-crop areas. It belongs to a class of herbicides known as synthetic auxins, which are a class of plant hormones which are involved in the regulation of plant growth.. That class of compounds mimics the action of natural

auxins but disrupt the normal growth processes in the target plants, leading to their death. Fluroxypyr-meptyl is effective against a range of weed species, including some that are resistant to other types of herbicides. You can find detailed UV spectra of Fluroxypyr-meptyl and information about its various lambda maxima by visiting the following link.

Fluroxypyr-meptyl can be retained and analyzed on a mixed-mode Primesep 100 column with a mobile phase consisting of water, Acetonitrile (MeCN), and Sulfuric acid (H_2SO_4). This analytical method can be UV detected at 220 nm with high resolution and peak symmetry.

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.

Method Parameters

Mobile Phase	MeCN/H_2O – 70/30%
Buffer	H_2SO_4 – 0.2%
Flow Rate	1.0 ml/min
Detection	UV 220 nm
Peak Retention Time	3.82 min
LOD	0.1 ppm
Class of Compounds	Herbicide
Analyzing Compounds	Fluroxypyr-meptyl

HPLC Column Used

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

Order this column at hplc-shop.de →