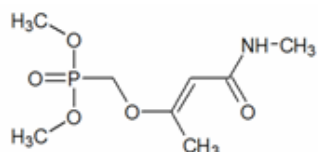


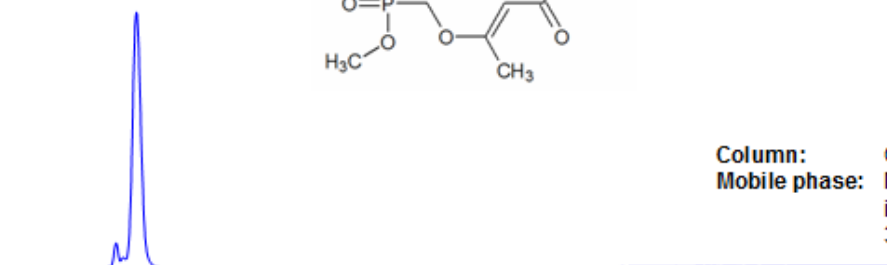
Retention of Monocrotophos on Primesep 100 and Obelisc R Columns

<https://sielc.com/Application-Retention-of-Monocrotophos-on-Primesep-100-and-Obelisc-R-Columns>

Chromatogram



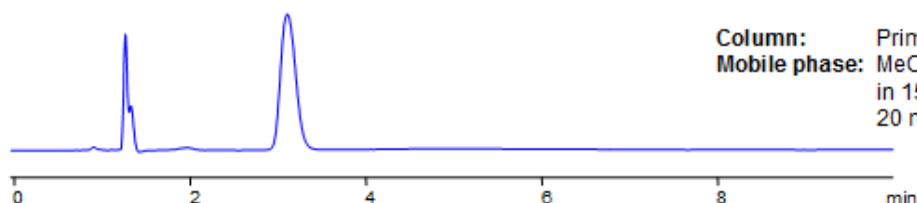
Size: 2.1 x 150 mm
Flow: 0.4 mL/min
Detection: UV 270 nm



Column: Obelisc R, 5µm
Mobile phase: MeCN gradient from 25% to 70% in 15 min, AmAc pH 3.0 from 30 mM to 60 mM



Column: Obelisc R, 5µm
Mobile phase: MeCN gradient from 10% to 70% in 15 min, AmAc pH 3.0 from 20 mM to 60 mM



Column: Primesep 100, 3µm
Mobile phase: MeCN gradient from 10% to 70% in 15 min, AmAc pH 3.0 from 20 mM to 60 mM

Description

Monocrotophos is a pesticide that is acutely toxic to both birds and humans. With similar action as other organophosphate pesticides it has been banned and many other countries. Monocrotophos was analyzed on two different stationary phases. Primesep 100 is a reverse phase column that contains embedded acidic ion-pairing groups, while Obelisc R retains with long hydrophobic chains and multiple ionic pairing groups on the surface. Method is LC/MS compatible and can be replicated to analyze dozens of other pesticides.

Method Parameters

Mobile Phase	Gradient MeCN – 10-70%, 15 min
Buffer	Gradient AmAc pH 3.0- 20-60 mM, 15 min
Flow Rate	0.4 ml/min
Detection	UV, 270 nm
Class of Compounds	Insecticide, Herbicide, Fungicide, Hydrophobic, Ionizable

HPLC Column Used

Primesep 100, 2.1×150 mm, 5 µm, 100A[Order this column at hplc-shop.de →](http://hplc-shop.de)