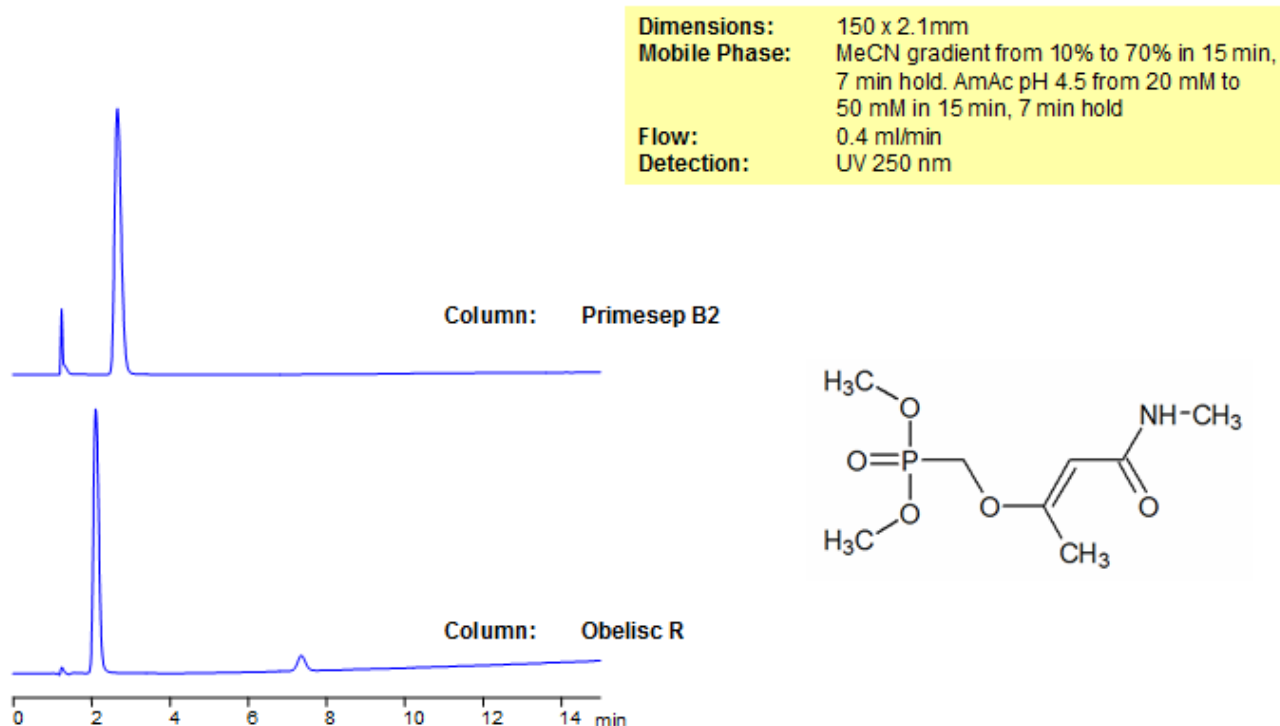


# Monocrotophos Separation on Obelisc and Primesep Mixed-Mode HPLC Columns

<https://sielc.com/Application-Monocrotophos-Separation-on-Obelisc-and-Primesep-Mixed-Mode-HPLC-Columns>

## Chromatogram



## Description

Banned in the U.S. and many other countries, Monocrotophos is a cheap and toxic organophosphate insecticide. It is especially toxic to birds, being blamed for widespread bird kills. The EURL (European Reference Laboratory) included monocrotophos in a the EURL-FV a proficiency test for multi-residue methods using QuEChERS (Quick, East, Cheap, Effective, Rugged, Safe) followed by LC/MS/MS for fruits and vegetables. Primesep B2 and Obelisc R were used to retain monocrotophos and separate it from impurities. Primesep B2 contains embedded basic ion-pairing groups and Obelisc R contains embedded ionic and hydrophobic groups which can assist in fine tuning separations. Method is LC/MS compatible and can be used as a general approach for analyzing monocrotophos, other organophosphate insecticides, and dozens of other pesticides.

## Method Parameters

<b>Mobile Phase</b>	Gradient MeCN – 10-70%, 15 min, 7 min hold
<b>Buffer</b>	Gradient AmAc pH 4,5- 20-50 mM, 15 min, 7 min hold
<b>Flow Rate</b>	0.4 ml/min
<b>Detection</b>	UV, 250 nm
<b>Class of Compounds</b>	Insecticide, Herbicide, Fungicide, Hydrophobic, Ionizable
<b>Analyzing Compounds</b>	Monocrotophos

## HPLC Column Used

**Obelisc R, 2.1×150 mm, 5 µm, 100A**

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