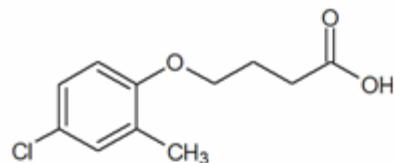


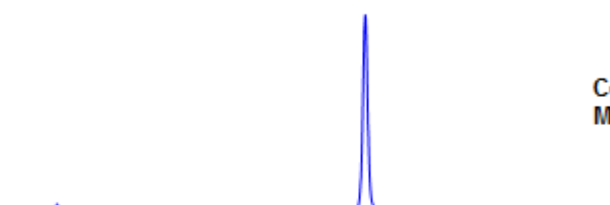
# MCPB Analysis Using Obelisc and Primesep Analytical HPLC Columns

<https://sielc.com/Application-MCPB-Analysis-Using-Obelisc-and-Primesep-Analytical-HPLC-Columns>

## Chromatogram



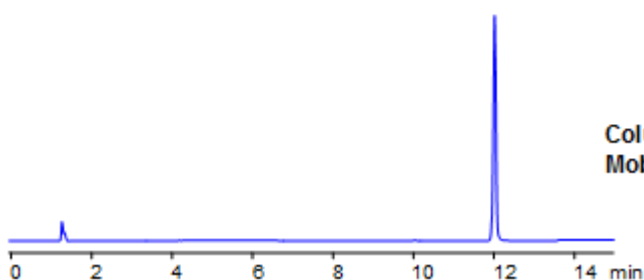
**Size:** 2.1 x 150 mm  
**Flow:** 0.4 mL/min  
**Detection:** UV 270 nm



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



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



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

## Description

MCPB (4-(4-Chloro-methylphenoxy)butanoic acid) is an herbicide used on post-emergence broad-leaf weeds. Its acute toxicity is low to moderate, and has been shown to damage liver and kidney tissue. Obelisc R and Primesep 100 were both used to separate MCPB. Primesep 100 is a reverse-phase column with embedded acidic ion-pairing groups while Obelisc R is a mixed-mode column with separates using ionic groups and a long hydrophobic chain. The European Union Reference Laboratory (EURL) included MCPB in an analysis of acidic pesticides using single residue methods. Method is LC/MS compatible and useful for many pesticides.

## Method Parameters

<b>Mobile Phase</b>	Gradient MeCN – 10-70%, 15 min
<b>Buffer</b>	Gradient AmAc pH 3.0- 20-60 mM, 15 min
<b>Flow Rate</b>	0.4 ml/min
<b>Detection</b>	UV, 270 nm

<b>Class of Compounds</b>	Insecticide, Herbicide, Fungicide, Hydrophobic, Ionizable
<b>Analyzing Compounds</b>	MCPB

#### HPLC Column Used

**Primesep 100, 2.1×150 mm, 5 µm, 100A**

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