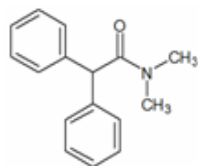


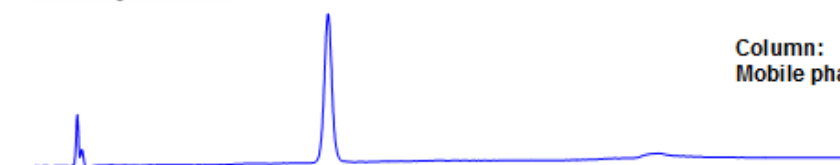
# HPLC Analysis of Diphenamid on Primesep 100 and Obelisc R

<https://sielc.com/Application-HPLC-Analysis-of-Diphenamid-on-Primesep-100-and-Obelisc-R>

## Chromatogram



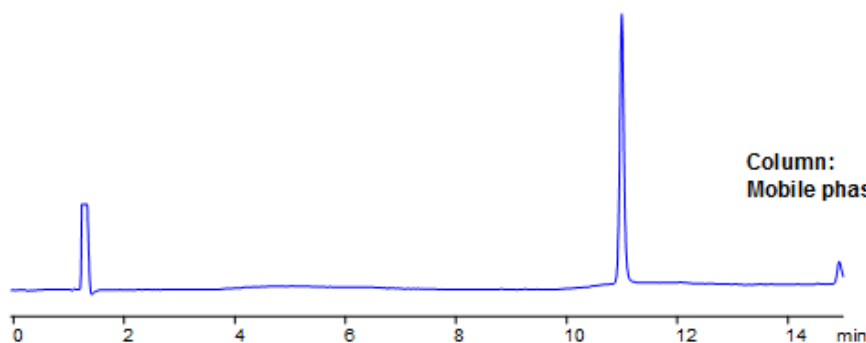
**Size:** 2.1 x 150 mm  
**Flow:** 0.4 mL/min  
**Detection:** UV 270 nm



**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

Diphenamid is an herbicide which selectively controls weedy grasses and broadleaf plants in the production of tobacco, tomatoes, peppers, cotton, and many more commercial crops. Diphenamid is a preemergence herbicide that is surface applied to soils and can be expected to control weeds for 6-8 months. Diphenamid 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

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