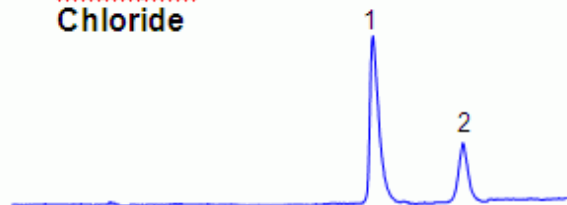


# HPLC Separation of Mepiquat on Obelisc R Column

<https://sielc.com/Application-Separation-of-Mepiquat-on-Obelisc-R-Column>

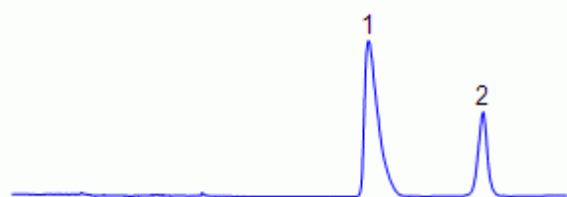
## Chromatogram

1. **Mepiquat**
2. **Chloride**

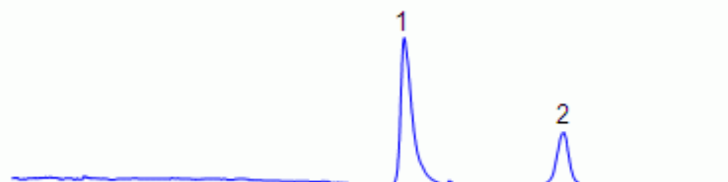


**Column:** Obelisc R  
**Size:** 4.6 x 150mm  
**Flow:** 1.0 mL/min  
**Detection:** ELSD 50C

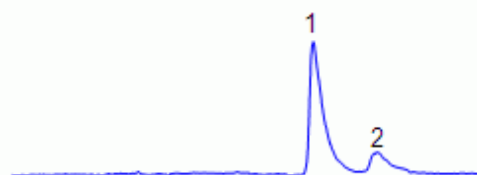
**Mobile phase:** MeCN –25%, AmAc pH 4.5 gradient 5-50 mM in 15 min



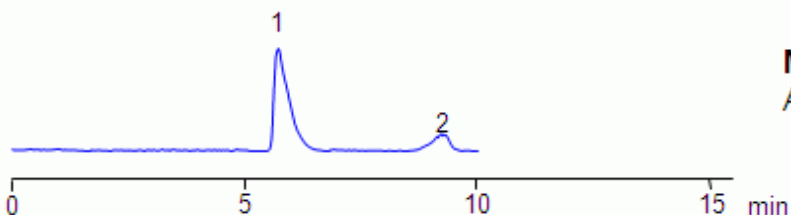
**Mobile phase:** MeCN –15%, AmAc pH 4.5 gradient 5-50 mM in 15 min



**Mobile phase:** MeCN –15%, AmAc pH 4.5 gradient 5-30 mM in 15 min



**Mobile phase:** MeCN –60%, AmAc pH 4.5 10mM



**Mobile phase:** MeCN –60%, AmAc pH 3.92 10mM

chr\_285.gif

## Description

Mepiquat is a plant growth regulator that is monitored by EPA in water. It is a quaternary amine that is very polar in nature. Mepiquat and other hydrophilic amines are not retained on reversed-phase columns, and produce poor peak shape due to residual silanol interactions. Ion-pairing reagent is required to retain mepiquat. Ion-pairing reagents are not compatible with LC/MS detection and most environmental application require high sensitivity methods to determine very low level of contaminants. Obelisc R mixed-mode column can be used for EPA methods for determination of common pesticides, herbicides and insecticides where analysis of very polar ionic compounds is required.

## Method Parameters

<b>Mobile Phase</b>	MeCN/H <sub>2</sub> O
<b>Buffer</b>	AmAc
<b>Flow Rate</b>	1.0 ml/min
<b>Detection</b>	ELSD 50C
<b>Class of Compounds</b>	Grow regulator, Hydrophilic, Ionizable
<b>Analyzing Compounds</b>	Mepiquat, Chloride

#### HPLC Column Used

**Obelisc R, 4.6x50 mm, 5 µm, 100A**

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