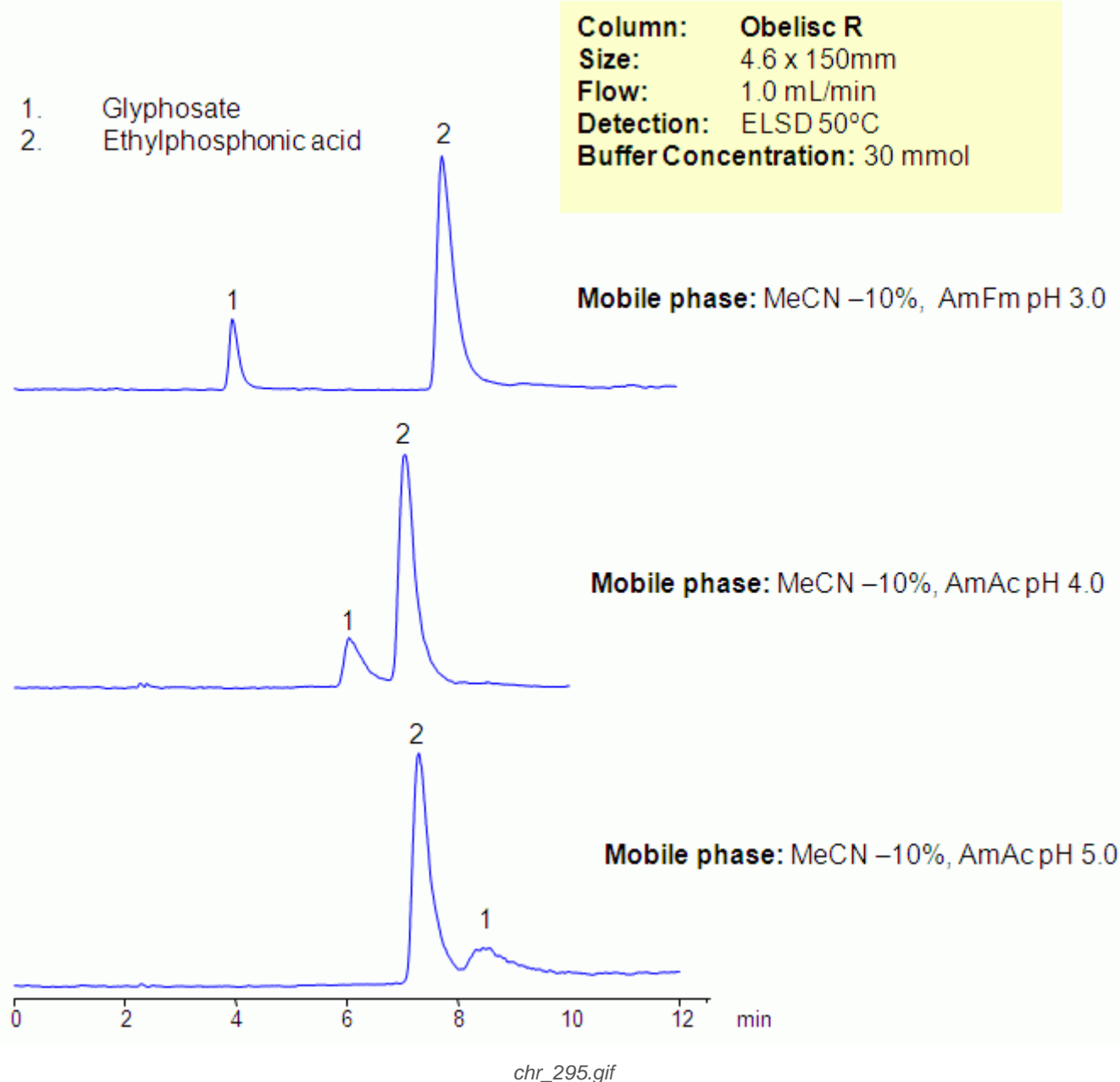


# Effect of pH on Separation of Glyphosate and Ethylphosphonic Acid

<https://sielc.com/Application-Effect-of-pH-on-Separation-of-Glyphosate-and-Ethylphosphonic-Acid>

## Chromatogram



## Description

Glyphosate is broad spectrum herbicide to kill weeds. Presence of glyphosate in water, fruits and veggies is regulated. Alkylphosphonic acids are decomposition byproducts of chemical warfare agents. Analysis of phosphonic acid in water is regulated by Environmental Protection Agency (EPA). All phosphonic acids are polar acidic compounds. Method was developed for glyphosate and ethylphosphonic acid. Both compounds are retained by ion-exchange mechanism. Method is compatible with LC/MS and can be used for analysis of glyphosate and alkylphosphonic acids in various matrices.

## Method Parameters

### Mobile Phase

MeCN – 10%

|                            |   |
|----------------------------|---|
| <b>Buffer</b>              | AmAc  |
| <b>Flow Rate</b>           | 1.0 ml/min  |
| <b>Detection</b>           | ELSD 50C  |
| <b>Class of Compounds</b>  | Insecticide, Herbicide, Fungicide, Hydrophobic, Ionizable |
| <b>Analyzing Compounds</b> | Glyphosate, Ethylphosphonic acid                          |

#### HPLC Column Used

**Obelisc R, 4.6×150 mm, 5 µm, 100A**

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