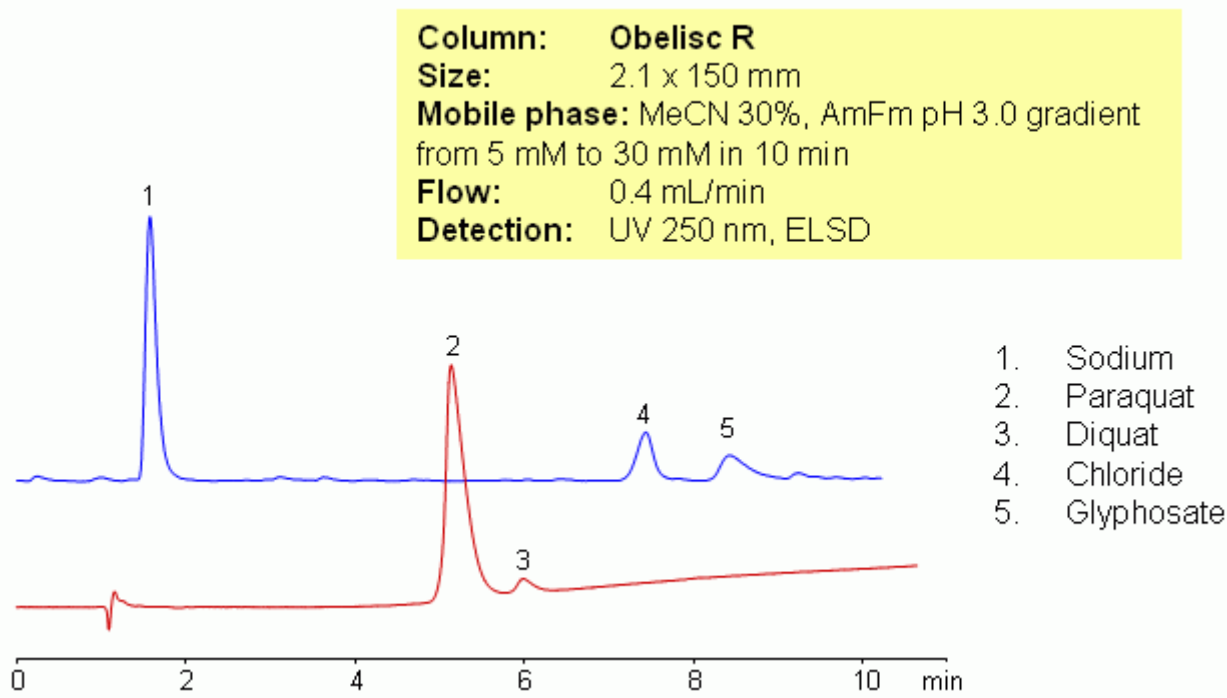


# Separation of Herbicides Paraquat, Diquat and Glyphosate in One Run with LC/MS Compatible Conditions

<https://sielc.com/Application-Separation-of-Herbicides-Paraquat-Diquat-and-Glyphosate-in-One-Run-With-LC-MS-Compatible-Conditions>

## Chromatogram



## Description

There is a need to separate different herbicides and pesticides in one run with LC/MS compatible conditions. Paraquat, diquat and glyphosate were separated on reversed-phase tri-modal cation- and anion-exchange column (Obelisc R) and on HILIC/ion-exchange columns (Obelisc N). Method explores unique properties of mixed-mode stationary phase which retains and separates cations like paraquat and diquat and anions/zwitter-ions like glyphosate in one run. Since columns are compatible with 100% organic and 100% water, a wide range of gradients can be used for analysis as well as isocratic conditions where it is desired. Method can be used for quantitation of these compounds in various matrices (soil, ground water, crops, food, etc.)

## Method Parameters

Mobile Phase	MeCN – 30%
Buffer	Gradient AmFm pH 3.0 – 5-30 mM, 10 min
Flow Rate	0.4 ml/min
Detection	UV, 250 nm, ELSD
Class of Compounds	Insecticide, Herbicide, Fungicide, Hydrophobic, Ionizable
Analyzing Compounds	Paraquat, Diquat, Glyphosate

## HPLC Column Used

**Obelisc R, 2.1x150 mm, 5 µm, 100A**

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