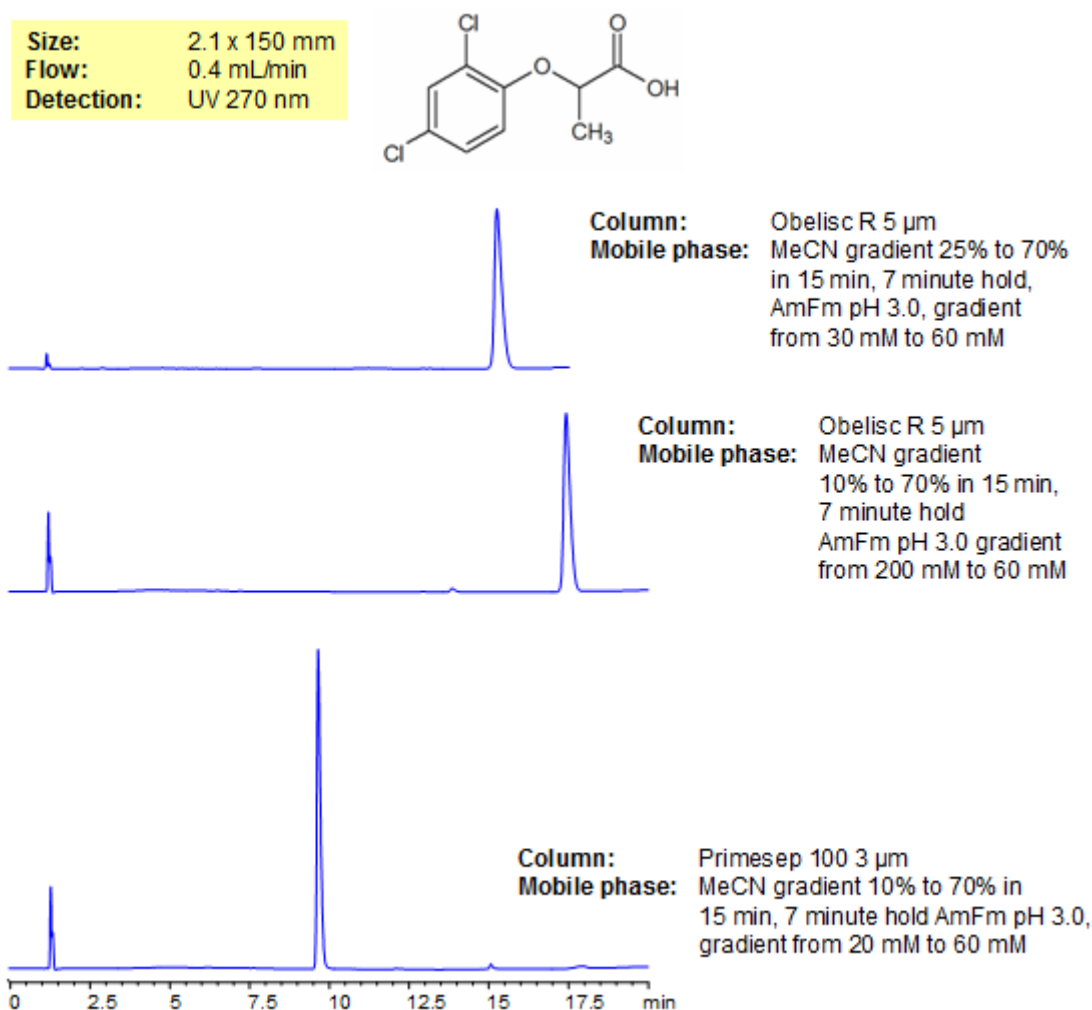


Dichlorprop (2,4-DP) Analysis on Primesep and Obelisc HPLC Columns

<https://sielc.com/Application-Dichlorprop-%282,4-DP%29-Analysis-on-Primesep-and-Obelisc-HPLC-Columns>

Chromatogram



Description

Dichlorprop (2,4-DP) is an herbicide similar to 2,4-D. Dichlorprop is used to control weeds and can be found in many weed killers. Only the R-isomer of 2,4-dichloropropanoic acid is used as an herbicide. The EURL (European Union Reference Laboratory) included dichlorprop in a list of acidic pesticides which can be analyzed by a QuEChERS (Quick, Easy, Cheap, Effective, Rugged, and Safe) single residue method. 2,4-DP was separated by both Obelisc R and Primesep 100. 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. Methods are LC/MS compatible and able to be used with many pesticides.

Method Parameters

Mobile Phase	Gradient MeCN – 10-70%, 15 min, 7 min hold
Buffer	Gradient AmAc pH 3.0- 20-60 mM, 15 min, 7 min hold
Flow Rate	0.4 ml/min
Detection	UV, 270 nm

Class of Compounds	Insecticide, Herbicide, Fungicide, Hydrophobic, Ionizable
Analyzing Compounds	Dichlorprop (2,4-DP)

HPLC Column Used

Primesep 100, 2.1×150 mm, 3 µm, 100A

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