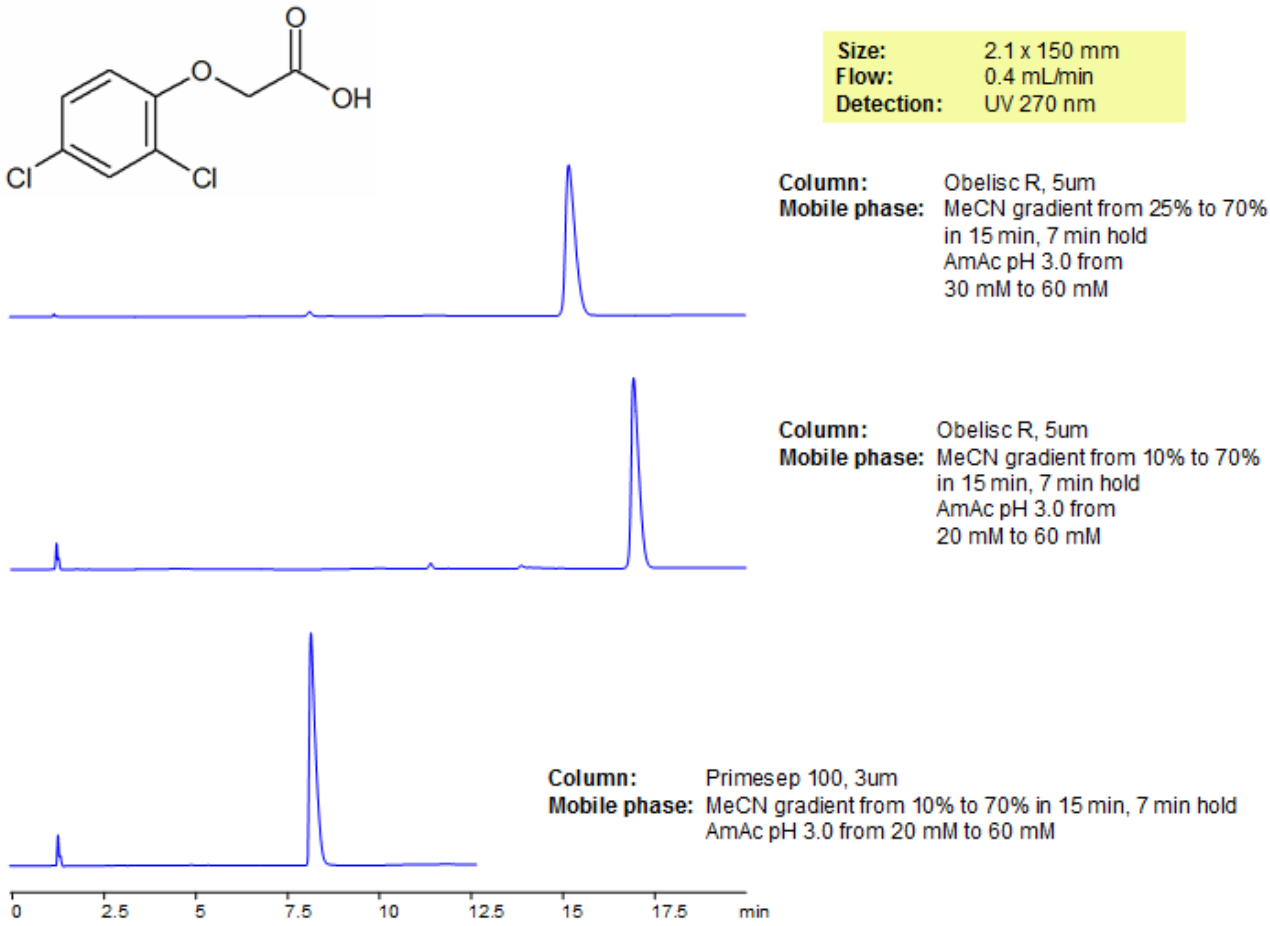
2,4-D Retention on Primesep 100 and Obelisc R

https://sielc.com/application-2-4-d-retention-on-primesep-100-and-obelisc-r

Chromatogram



Description

2,4-D makes up half of the formula for Agent Orange, the defoliant that was used during the Vietnam War and Malayan Emergency. Commonly used in lawn and turf pesticides, 2,4-D is typically mixed with other pesticides such as mecoprop and dicamba. It was analyzed on Primesep 100 and Obelisc R. Primesep 100 separates using reverse-phase and acidic ion-pairing groups. Obelisc R has many modes of separation which allow it to tune retention. Method is LC/MS compatible and conditions could be replicated to retain many pesticides.

Method Parameters

Mobile Phase	Gradient MeCN – 10-70%
Buffer	Gradient AmAc pH 3.0- 20-60 mM
Flow Rate	0.4 ml/min
Detection	UV, 270 nm
Class of Compounds	Insecticide, Pesticide, Hydrophobic, Ionizable
Analyzing Compounds	2,4-D

HPLC Column Used

Primesep 100, 2.1×150 mm, 5 µm, 100A
Order this column at hplc-shop.de →