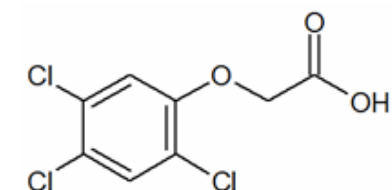


HPLC Analysis of 2,4,5-T on Mixed-Mode Columns

<https://sielc.com/Application-HPLC-Analysis-of-2-4-5-T-on-Mixed-Mode-Columns>

Chromatogram



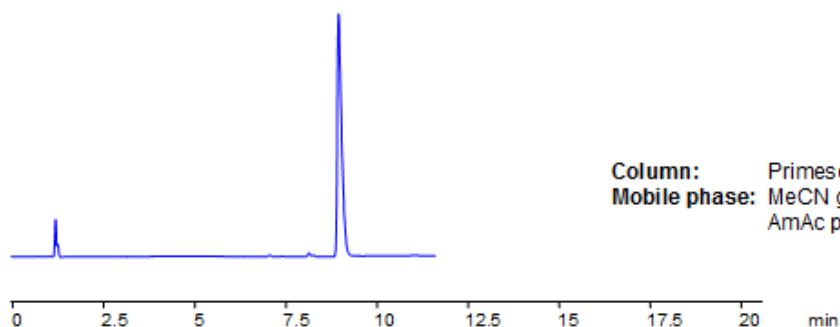
Size: 2.1 x 150 mm
Flow: 0.4 mL/min
Detection: UV 270 nm



Column: Obelisc R, 5µm
Mobile phase: MeCN gradient from 25% to 70% in 15 min, 7 min hold
AmAc pH 3.0 from 30 mM to 60 mM



Column: Obelisc R, 5µm
Mobile phase: MeCN gradient from 10% to 70% in 15 min, 7 min hold
AmAc pH 3.0 from 20 mM to 60 mM



Column: Primesep 100, 3µm
Mobile phase: MeCN gradient from 10% to 70% in 15 min, 7 min hold
AmAc pH 3.0 from 20 mM to 60 mM

Description

· Separation type: Liquid Chromatography Mixed-mode

2,4,5-T is a synthetic herbicide that defoliates broad-leaf plants. It was a major component of Agent Orange, a defoliant used during the Vietnam War. 2,4,5-T has been replaced by dicamba and triclopyr due to its possible toxicity. 2,4,5-T was included in a proficiency test run by the EURL (European Union Reference Laboratory) using QuEChERS methodology on acidic pesticides. Obelisc R retained 2,4,5-T because it has a long hydrophobic chain and ionic pairing groups. Primesep 100 retains by reverse-phase and with acid ion-pairing groups. Method is LC/MS compatible and same conditions can be used on many different 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	2,4,5-T

HPLC Column Used

Primesep 100, 2.1×150 mm, 5 µm, 100A

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