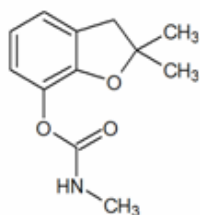
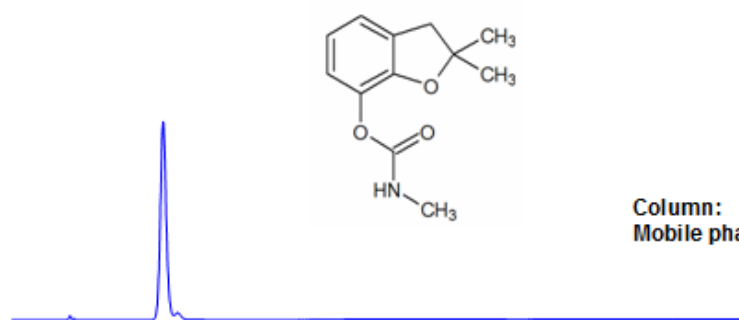


HPLC Separation of Carbofuran on Obelisc R and Primesep 100 Columns

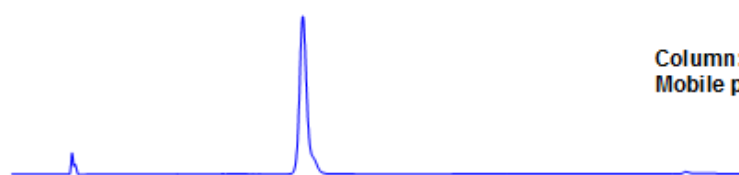
<https://sielc.com/Application-HPLC-Separation-of-Carbofuran-on-Obelisc-R-and-Primesep-100-Columns>

Chromatogram

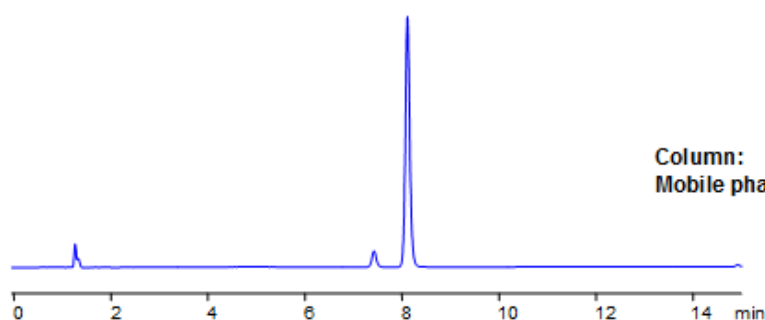


Size: 2.1 x 150 mm
Flow: 0.4 mL/min
Detection: UV 270 nm

Column: Obelisc R, 5µm
Mobile phase: MeCN gradient from 25% to 70% in 15 min, 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, 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, AmAc pH 3.0 from 20 mM to 60 mM

Description

Carbofuran is an insecticide notable for its high toxicity to vertebrates, especially birds; it is one of the most toxic to humans as well. While banned in many countries such as the U.S. and Canada, it can be purchased over-the-counter in some countries such as Kenya. Carbofuran was considered a target pesticide by the EURL (European Union Reference Laboratory) for the EUPT-FF9 2015 a proficiency test for the analysis of over a hundred pesticides. Obelisc R and Primesep 100 were used to analyze carbofuran. Primesep 100 separates by reverse-phase and utilizing embedded acidic ion-pairing groups. Obelisc R uses long hydrophobic chains and multiple ion-pairing groups.

Method Parameters

Mobile Phase	Gradient MeCN – 10-70%, 15 min
Buffer	Gradient AmAc pH 3.0- 20-60 mM, 15 min
Flow Rate	0.4 ml/min
Detection	UV, 270 nm
Class of Compounds	Insecticide, Herbicide, Fungicide, Hydrophobic, Ionizable

HPLC Column Used

Primesep 100, 2.1×150 mm, 5 µm, 100A

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