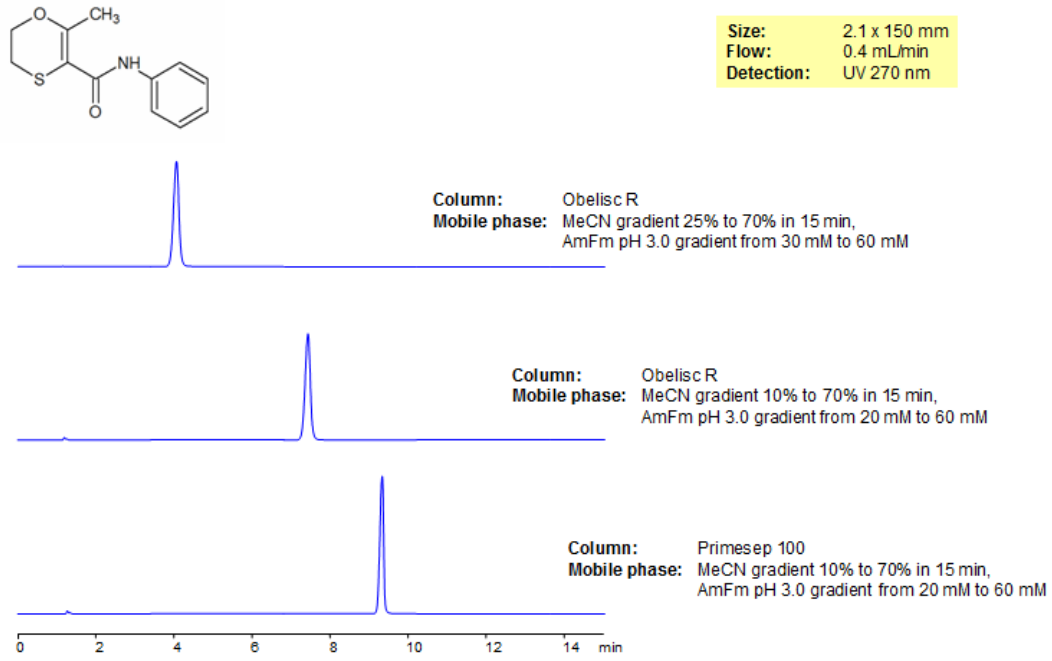
Retaining the Fungicide Carboxin on Primesep and Obelisc HPLC Columns



Carboxin or carboxine is an oxathin fungicide considered by the EURL (European Union Reference Laboratory) to be a target pesticide. It was placed on a Target Pesticide List for the EUPT-CF9 2015 (European Union Proficiency Test for Cereals and Feeding stuff). A method for separating carboxin was developed for Primesep 100 and Obelisc R columns. Both columns are mixed-mode offering unique retention tuning. Obelisc R contains ion-pairing groups and a long hydrophobic chain, while Primesep 100 contains embedded acidic ion-pairing groups. Method is LC/MS compatible and can be used on many pesticides and herbicides.

SIELC has developed the Obelisc™ columns, which are mixed-mode and utilize Liquid Separation Cell technology (LiSC™). These cost-effective columns are the first of their kind to be commercially available and can replace multiple HPLC columns, including reversed-phase (RP), AQ-type reversed-phase, polar-embedded group RP columns, normal-phase, cation-exchange, anion-exchange, ion-exclusion, and HILIC (Hydrophilic Interaction Liquid Chromatography) columns. By controlling just three orthogonal method parameters - buffer concentration, buffer pH, and organic modifier concentration - users can adjust the column properties with pinpoint precision to separate complex mixtures.

Method Parameters

Column	Primesep 100, 2.1×150 mm, 5 µm, 100 Å
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

Quelle: https://sielc.com/Application-Retaining-the-Fungicide-Carboxin-on-Primesep-and-Obelisc-HPLC-Columns