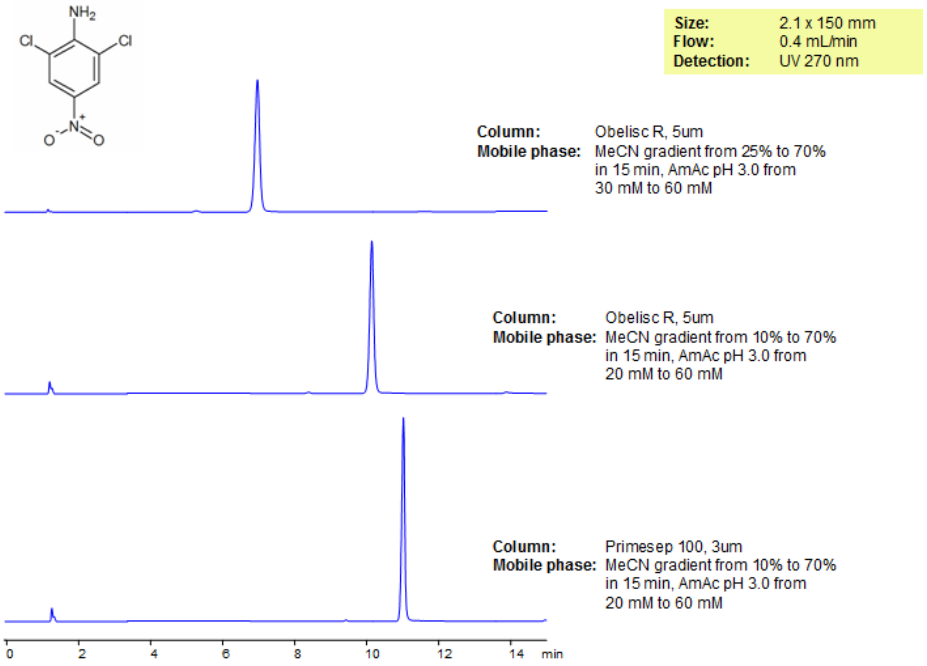
HPLC Analysis of Dichloran on Mixed-Mode Columns



Dichloran (DCNA) is a fungicide analyzed on the mixed-mode columns Obelisc R and Primesep 100. DCNA was separated from impurities on Obelisc R, which contains embedded ionic and hydrophobic groups which can assist in fine tuning separations. Primesep 100 which contains embedded acidic ion-pairing groups also retained DCNA. Method is LC/MS compatible and can be used as a general approach for analyzing DCNA and many other pesticides.

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%
Buffer	Gradient AmAc pH 3.0- 20-60 mM
Flow Rate	0.4 mL/min
Detection	UV, 270 nm

Quelle: https://sielc.com/Application-HPLC-Analysis-of-Dichloran-on-Mixed-Mode-Columns