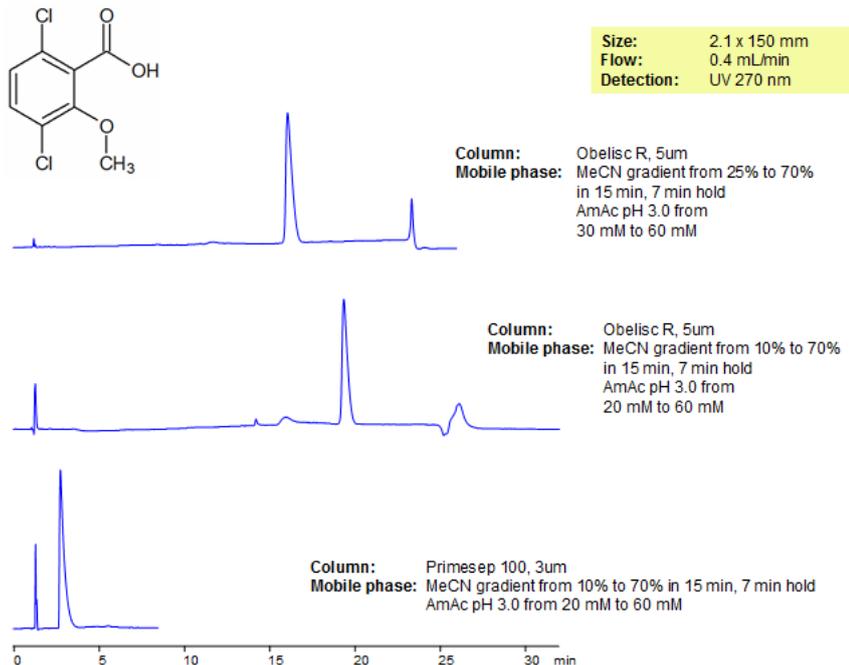


Retention of the Herbicide Dicamba on Mixed-Mode HPLC Columns



Dicamba is an organochloride derivative of benzoic acid. It is used as a non-specific herbicide that is usually used on non-crop plants. Dicamba is moderately toxic to humans, and both persistent and mobile in soils. The EURL (European Union Reference Laboratory) tested dicamba in an analysis of acidic pesticides. Primesep 100 and Obelisc R were used to separate dicamba with unique separation. Method is LC/MS compatible

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, 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

Quelle: <https://sielc.com/Retention-of-the-Herbicide-Dicamba-on-Mixed-Mode-HPLC-Columns>