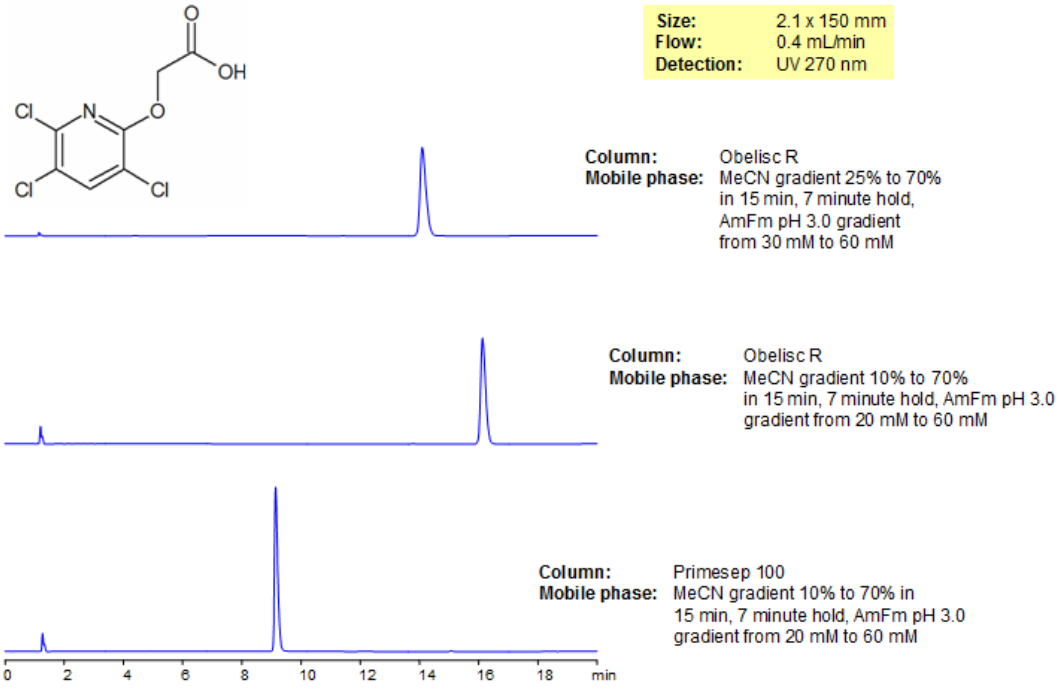
HPLC Separation of Triclopyr



Triclopyr (3,5,6-Trichloro-2-pyridinyloxyacetic acid) is sold under the brand names Turflon, Weed-B-Gon, and Brush-B-Gon. Triclopyr controls broad leaf plants and is very similar to the pesticide it replaced 2,4,5-T. The EURL (European Union Reference Laboratory) included triclopyr in an analysis of acidic pesticides using QuEChERS method. Primesep 100 and Obelisc R were used to retain and separate triclopyr from impurities. Method is LC/MS compatible and developed to be used for many 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%, 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/HPLC%20Separation%20of%20Triclopyr

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