Positional isomers of phenoxy acid herbicides

Application Note

Environmental

Authors
Agilent Technologies, Inc.

Introduction
Agilent Pursuit PFP columns are ideal for the residue analysis of phenoxyacetic acid herbicides by HPLC.
Conditions

Column: Agilent Pursuit PFP, 4.6 mm x 150 mm 5 μm
Part No. A3050150X046

Mobile Phase: acetonitrile: water + 0.1% HCOOH, 40:60

Flow Rate: 1.0 mL/min

Temperature: Ambient

Detection: 220 nm

Injection Vol.: 5 μL

Sample Concentration: 1 mg/mL all components

Solvent Sample: Water

Peak identification

1. phenoxyacetic acid
2. o-chlorophenoxyacetic acid
3. p-chlorophenoxyacetic acid
4. 2,4-dichlorophenoxyacetic acid
5. 2,4,5-trichlorophenoxyacetic acid
6. 2,4,5-trichlorophenoxypropionic acid