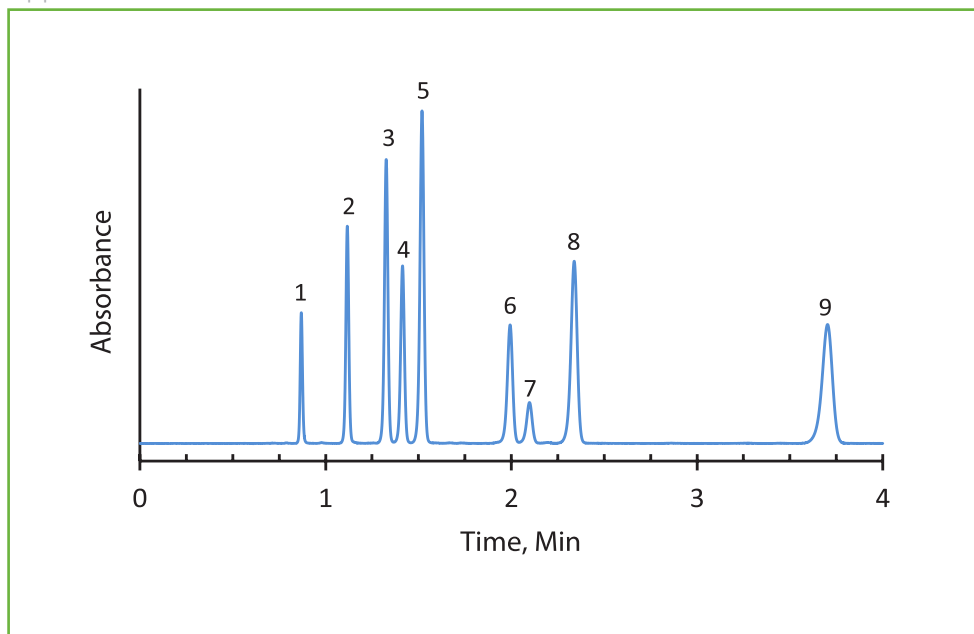




Separation of Phenyl Urea Pesticides on HALO® Phenyl-Hexyl Phase

Application Note 55-PU



PEAK IDENTITIES:

1. Fenuron
2. Monuron
3. Fluomethuron
4. Isoproturon
5. Diuron
6. Siduron A
7. Siduron B
8. Linuron
9. Neburon

This separation illustrates the use of the highly efficient HALO® Fused-Core® Phenyl-Hexyl stationary phase in the analysis of common herbicides. The short run times allow analyses using isocratic conditions so that column equilibration time is not required between runs.

TEST CONDITIONS:

Column: HALO 90 Å Phenyl-Hexyl, 2.7 µm, 4.6 x 100 mm

Part Number: 92814-606

Mobile Phase: 50/50 - A/B

A: 0.025 M Potassium phosphate buffer, adj. to pH 2.5

B: Acetonitrile

Flow Rate: 1.5 mL/min

Pressure: 220 bar

Temperature: 30 °C

Detection: UV 245 nm, VWD

Injection Volume: 0.5 µL

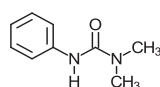
Sample Solvent: Acetonitrile

Response Time: 0.02 sec

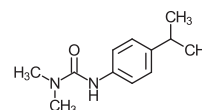
Flow Cell: 2.5 µL semi-micro

LC System: Shimadzu Prominence UFLC XR

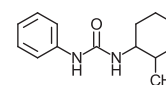
STRUCTURES:



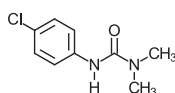
Fenuron



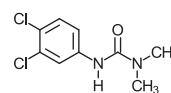
Isoproturon



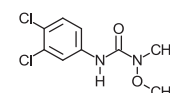
Siduron B



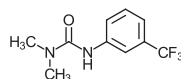
Monuron



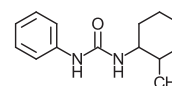
Diuron



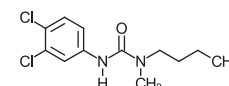
Linuron



Fluomethuron



Siduron A



Neburon

