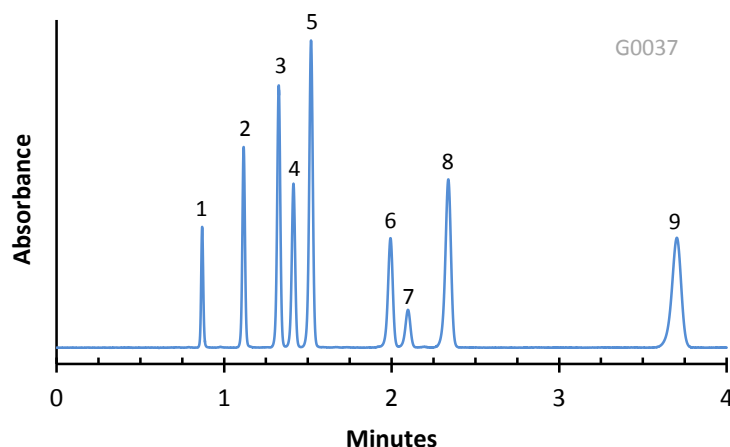


Application Note: 55-PU

Separation of Phenyl Urea Pesticides on HALO Phenyl-Hexyl Phase



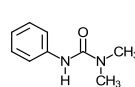
PEAK IDENTITIES:

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

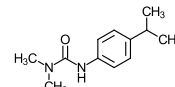
TEST CONDITIONS:

Column: 4.6 x 100 mm, HALO Phenyl-Hexyl
 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

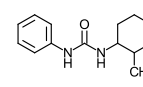
STRUCTURES:



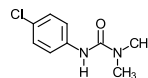
Fenuron



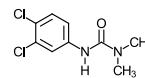
Isoproturon



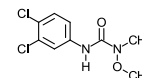
Siduron B



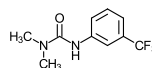
Monuron



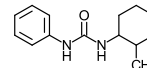
Diuron



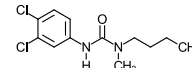
Linuron



Fluomethuron



Siduron A



Neburon

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.