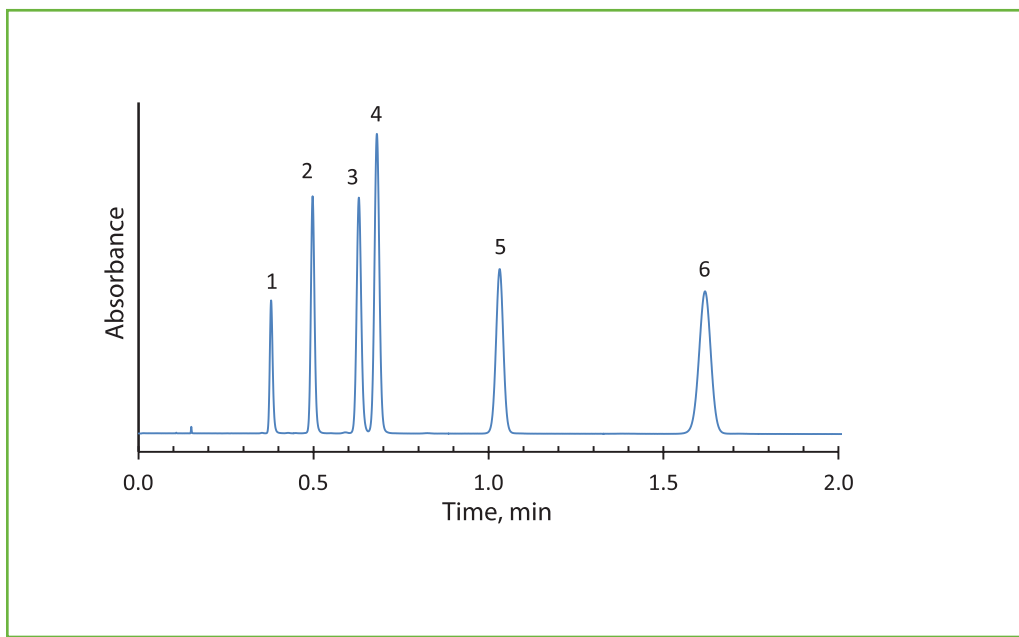




Isocratic Separation of Phenyl Ureas on HALO® ES-CN

Application Note 54-P



PEAK IDENTITIES:

1. Fenuron
2. Monuron
3. Fluomethuron
4. Diuron
5. Linuron
6. Neburon

Phenyl urea compounds are common herbicides. Due to concern about these chemicals being in ground and drinking water, HPLC can be used to determine the levels present. In this separation, six phenyl ureas are analyzed on a HALO® ES-CN column in under two minutes.

TEST CONDITIONS:

Column: HALO 90 Å ES-CN, 2.7 μm ,
4.6 x 50 mm

Part Number: 92814-404

Mobile Phase: 50/50 - A/B

A: 0.02 M phosphate buffer, adj. to pH 2.5

B: Acetonitrile

Flow Rate: 2.0 mL/min

Pressure: 200 bar

Temperature: 20 °C

Detection: UV 245 nm, VWD

Injection Volume: 0.5 μL

Sample Solvent: Acetonitrile/water

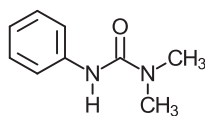
Response Time: 0.02 sec

Flow Cell: 2.5 μL semi-micro

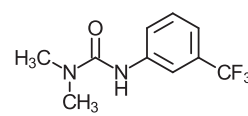
LC System: Shimadzu Prominence UFLC XR

Extra column volume: ~14 μL

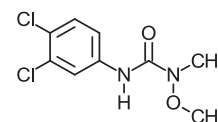
STRUCTURES:



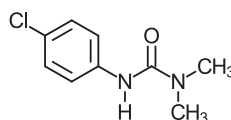
Fenuron



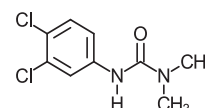
Fluomethuron



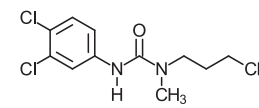
Linuron



Monuron



Diuron



Neburon

