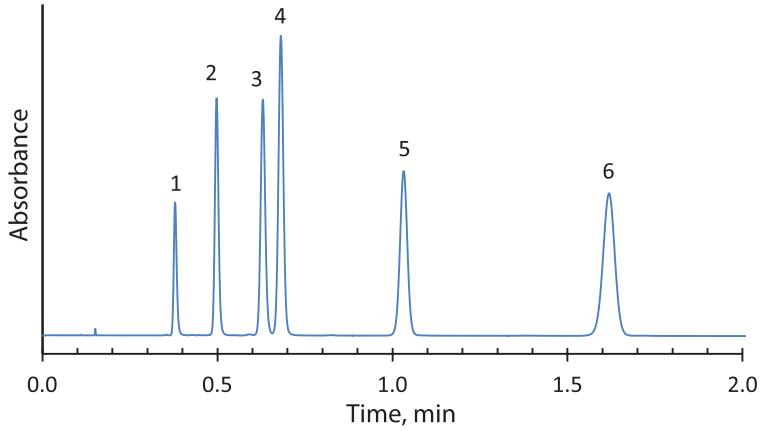
HALO®

ENVIRONMENTAL

Isocratic Separation of Phenyl Ureas on HALO® ES-CN

Application Note 54-P



PEAK IDENTITIES:

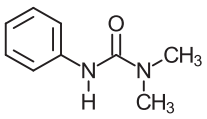
1. Fenuron
2. Monuron
3. Fluomethuron
4. Diuron
5. Linuron
6. Neburon

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® RP-Amide column in under two minutes.

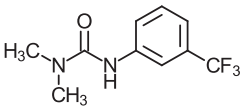
TEST CONDITIONS:

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

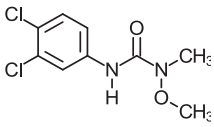
STRUCTURES:



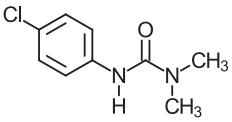
Fenuron



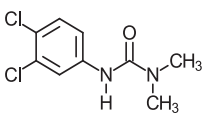
Fluomethuron



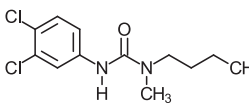
Linuron



Monuron



Diuron



Neburon