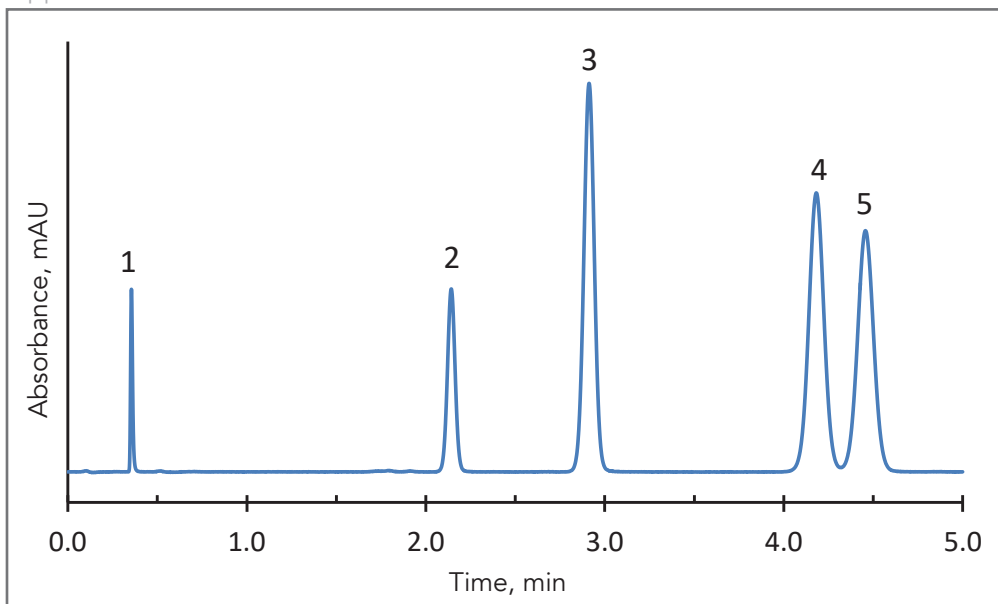




Isocratic Separation of Dinitrotoluenes on HALO® PFP Phase

Application Note 36-EX



PEAK IDENTITIES:

1. Uracil
2. 2,6-Dinitrotoluene
3. 2,4-Dinitrotoluene
4. 3,4-Dinitrotoluene
5. 2,3-Dinitrotoluene

These dinitrotoluenes are difficult to separate, but can be separated with baseline resolution in under 5 minutes using a HALO® Fused-Core® PFP (perfluorophenylpropyl) column.

TEST CONDITIONS:

Column: HALO 90 Å PFP, 2.7 μm,
4.6 x 50 mm

Part Number: 92814-409

Mobile Phase: 45/55 - A/B

A: Water

B: Methanol

Flow Rate: 1.5 mL/min

Pressure: 225 bar

Temperature: 30 °C

Detection: UV 254 nm, VWD

Injection Volume: 1.0 μL

Sample Solvent: 50/50 acetonitrile/methanol

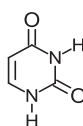
Response Time: 0.02 sec

Flow Cell: 2.5 μL semi-micro

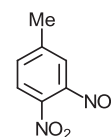
LC System: Shimadzu Prominence UFLC XR

Extra Column Volume: ~14 μL

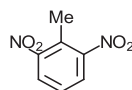
STRUCTURES:



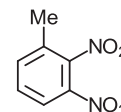
Uracil



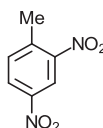
3,4-Dinitrotoluene



2,6-Dinitrotoluene



2,3-Dinitrotoluene



2,4-Dinitrotoluene

