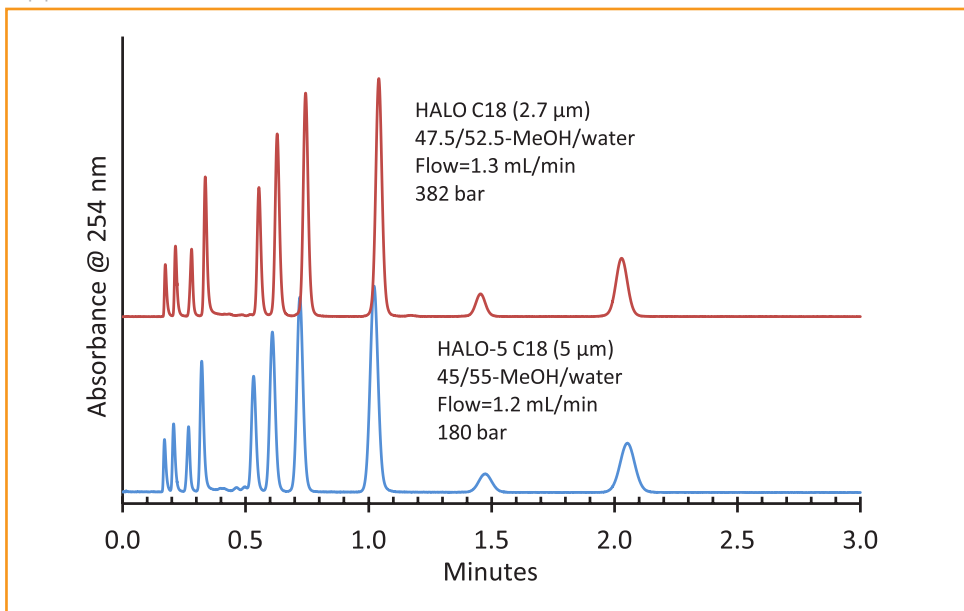




Comparable Selectivity of HALO® C18, 2.7 µm and HALO® C18, 5 µm

Application Note 77-HA



PEAK IDENTITIES:

1. Uracil
2. Resorcinol
3. Aniline
4. 4-Chloroaniline
5. Acetoacetanilide
6. Dimethylphthalate
7. Cinnamyl alcohol
8. 2,6-Dinitrotoluene
9. Tolbutamide
10. 4-Chloro-3-nitroanisole

This mixture of compounds with varying functional groups and polarity show the same selectivity on both the 5 µm and 2.7 µm HALO® C18 columns with only minor adjustments in flow rate and mobile phase composition being required. This separation demonstrates the ability to change from one HALO® particle size to the other without needing to redevelop the method.

TEST CONDITIONS:

Columns:

- 1) HALO 90 Å C18, 2.7 µm, 3.0 x 50 mm
Part Number: 92813-402
- 2) HALO 90 Å C18, 5.0 µm, 3.0 x 50 mm
Part Number: 95813-402

Mobile Phase: See chart

Flow Rate: See chart

Pressure: See chart

Temperature: 30 °C

Detection: UV 254 nm, VWD

Injection Volume: 1.0 µL

Sample Solvent: Methanol

Response Time: 0.02 sec

Flow Cell: 2.5 µL semi-micro

LC System: Shimadzu Prominence UFLC XR

Extra Column Volume: ~14 µL

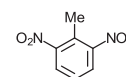
STRUCTURES:



Uracil



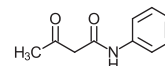
4-Chloroaniline



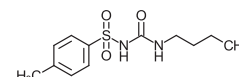
2,6-Dinitrotoluene



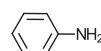
Resorcinol



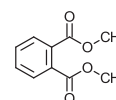
Acetoacetanilide



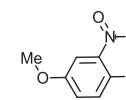
Tolbutamide



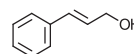
Aniline



Dimethylphthalate



4-Chloro-3-nitroanisole



Cinnamyl alcohol

