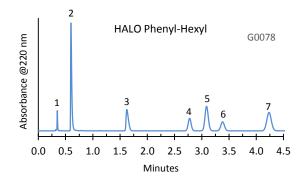
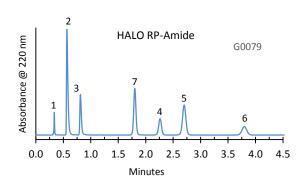
HALO: | Fused-Core® Particle Technology

Application Note: 095-P

Separation of Food Additives on HALO Phenyl-Hexyl and RP-Amide Phases





TEST CONDITIONS:

Column: 4.6 x 50 mm, Phenyl-Hexyl, HALO RP-Amide, 2.7 μm

Part Numbers: 92814-406,-407, respectively

Mobile Phase: 70/30-A/B

A= 0.025 M phosphate buffer, pH=2.5

B= Methanol

Flow Rate: 1.5 mL/min.

Pressure: approximately 220 Bar

Temperature: 40 °C Detection: UV 220 nm, VWD

Injection Volume: 2.0 µL Sample Solvent: 50/50-Water/methanol

Response Time: 0.02 sec. Flow Cell: 2.5 µL semi-micro

LC System: Shimadzu Prominence UFLC XR

Extra column volume: ~14µL

These compounds are often added to foods to sweeten or preserve them. They can be rapidly analyzed using HALO Phenyl-Hexyl or RP-Amide phases. Note the difference in retention and selectivity of the two phases when run under the same conditions. This allows for flexibility in method development and optimization of the separation.

STRUCTURES:

Ascorbic acid

Saccharin

Aspartame

Sorbic acid

PEAK IDENTITIES:

- 1. Ascorbic acid
- 2. Saccharin
- 3. Aspartame
- 4. Sorbic acid
- 5. Benzoic acid
- 6. Methyl paraben
- 7. Dehydroacetic acid

Benzoic acid

Methyl paraben

Dehydroacetic acid



FOR MORE INFORMATION OR TO PLACE AN ORDER, CONTACT: