



HALO[®]

AQ-C18

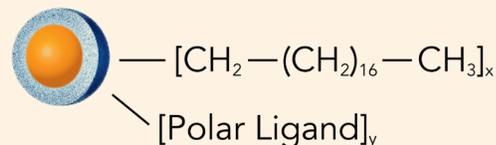


100% AQUEOUS COMPATIBLE

HALO[®] AQ-C18

SELECTIVITY, EFFICIENCY AND RETENTION FOR POLAR COMPOUNDS

The AQ-C18 is a C18 bonded phase prepared using a proprietary procedure that increases phase polarity, making the AQ-C18 an excellent alternative C18 to consider, especially in aqueous mobile phases. HALO[®] AQ-C18 is very complimentary to classic HALO[®] C18 and extends C18 usefulness to 100% aqueous mobile phases.

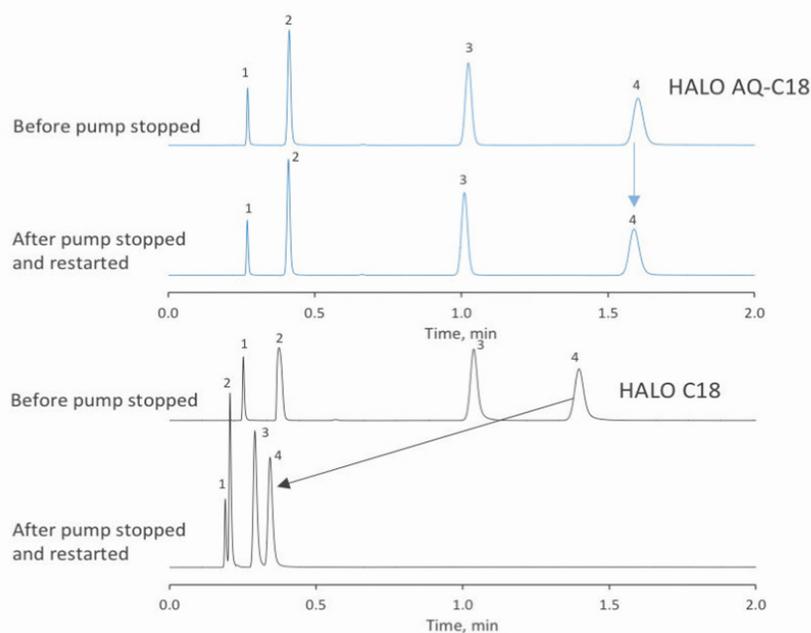


FEATURES AND BENEFITS: HALO[®] AQ-C18

- Resistant to dewetting and compatible with 100% aqueous mobile phases
- Ideal for mixtures of polar and non-polar solutes
- Retains polar molecules more than classic C18 phases under most mobile phase conditions
- High retentivity of C18 with alternate selectivity
- USP: L1
- Available Particle Sizes: 2 μm, 2.7 μm, 5 μm

RESISTANCE TO DEWETTING

The unique polar modified bonded phase of HALO[®] AQ-C18 enables it to be run in 100% aqueous mobile phase without experiencing loss in retention due to dewetting when pressure is relieved. The retention is nearly 100% maintained compared to the HALO[®] C18 after the pump is stopped and restarted.



PEAK IDENTITIES:

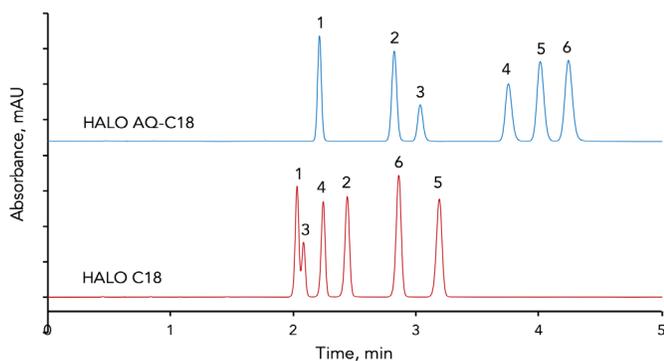
1. Thiourea
2. 5-Fluorocytosine
3. Adenine
4. Thymine

TEST CONDITIONS:

Column: HALO 90 Å AQ-C18, 2.7 μm 4.6 x 50 mm
Part Number: 92814-422
Column: HALO 90 Å C18, 2.7 μm 4.6 x 50 mm
Part Number: 92814-402
Mobile Phase: 100% 20 mM Potassium Phosphate buffer, pH 7
Flow Rate: 2 mL/min.
Temperature: 30 °C
Detection: 254 nm
Injection: 0.5 μL

INCREASED RETENTION FOR POLAR COMPOUNDS-DIFFERENT SELECTIVITY

The HALO® AQ-C18 column exhibits increased retention of polar compounds along with a different elution order relative to the HALO® C18.



PEAK IDENTITIES:

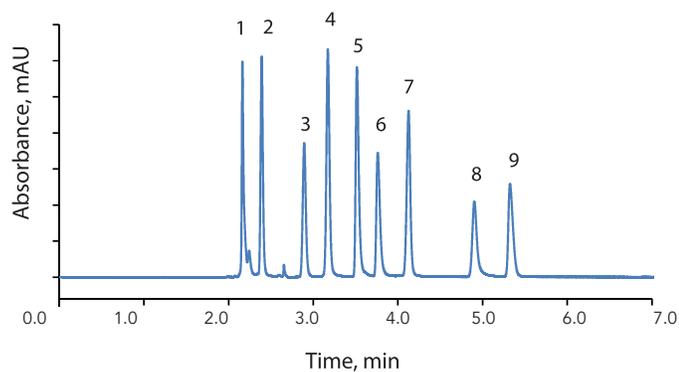
1. Cinnamyl alcohol
2. 4-Bromoacetanilide
3. Nitrobenzene
4. Anisole
5. 3,4-Dinitrotoluene
6. 2,4-Dinitrotoluene

TEST CONDITIONS:

Column: HALO 90 Å C18, 2.7 μ m, 4.6 x 100 mm
Column: HALO 90 Å AQ-C18, 2.7 μ m, 4.6 x 100 mm
Mobile Phase: 48/52 - A/B
A: Water
B: Methanol
Flow Rate: 1.4 mL/min.
Pressure: 344 bar (C18)
329 bar (AQ-C18)
Temperature: 30 °C
Detection: UV 254 nm, WWD
Injection Volume: 0.5 μ L
Sample Solvent: Methanol
Response Time: 0.02 sec.
Data Rate: 25 Hz
Flow Cell: 2.5 μ L semi-micro
LC System: Shimadzu Prominence UFLC XR
Extra Column Volume: ~14 μ L

SEPARATION OF POLAR ORGANIC ACIDS

This separation of nine polar organic acids is performed on a HALO® AQ-C18 column using 100% aqueous mobile phase at low pH. The 250 mm column length was chosen to provide excellent resolution with reasonable run time for this polar mixture.



PEAK IDENTITIES:

1. Oxalic acid
2. Tartaric acid
3. Malic acid
4. Ascorbic acid
5. L-Lactic acid
6. Acetic acid
7. Citric acid
8. Succinic acid
9. Fumaric acid

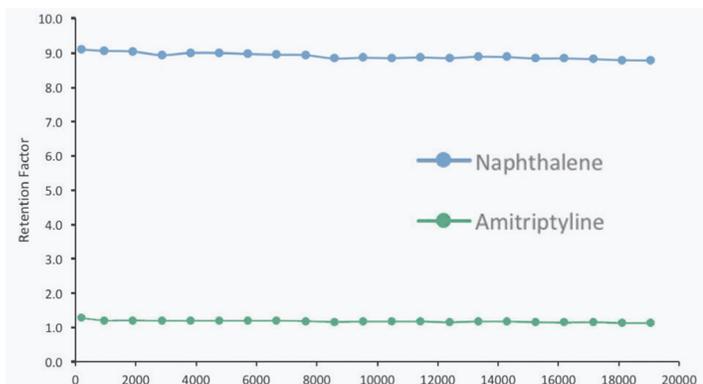
TEST CONDITIONS:

Column: HALO 90 Å AQ-C18, 2.7 μ m, 4.6 x 250 mm
Isocratic: 20 mM potassium phosphate buffer, pH 2.7
Flow Rate: 1.0 mL/min.
Pressure: 307 bar
Temperature: 40 °C
Detection: UV 214 nm, PDA
Injection Volume: 20 μ L
Sample Solvent: Mobile phase
Response Time: 0.025 sec.
Data Rate: 100 Hz
Flow Cell: 1.0 μ L
LC System: Shimadzu Nexera X2

HIGH STABILITY AT LOW PH

Stability of the HALO 90 Å AQ-C18 columns is demonstrated using pH 2 mobile phase conditions.

The retention is maintained after 19,000 column volumes.

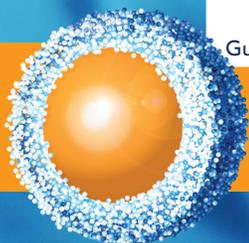


PART NUMBERS

Dimensions: ID x Length (in mm)	90 Å AQ-C18 (2.0 µm)	90 Å AQ-C18 (2.7 µm)	90 Å AQ-C18 (5 µm)
1.5 x 50		9281X-422	
1.5 x 100		9281X-622	
1.5 x 150		9281X-722	
2.1 x 20	91812-222	92812-222	95812-222
2.1 x 30	91812-322	92812-322	95812-322
2.1 x 50	91812-422	92812-422	95812-422
2.1 x 75	91812-522	92812-522	95812-522
2.1 x 100	91812-622	92812-622	95812-622
2.1 x 150	91812-722	92812-722	95812-722
2.1 x 250	91812-922	92812-922	95812-922
3.0 x 20	91813-222	92813-222	95813-222
3.0 x 30	91813-300	92813-322	95813-322
3.0 x 50	91813-422	92813-422	95813-422
3.0 x 75	91813-522	92813-522	95813-522
3.0 x 100	91813-622	92813-622	95813-622
3.0 x 150	91813-722	92813-722	95813-722
3.0 x 250	91813-922	92813-922	95813-922
4.6 x 20		92814-222	95814-222
4.6 x 30		92814-322	95814-322
4.6 x 50		92814-422	95814-422
4.6 x 75		92814-522	95814-522
4.6 x 100		92814-622	95814-622
4.6 x 150		92814-722	95814-722
4.6 x 250		92814-922	95814-922

HALO® GUARD COLUMNS 3 PACK

Dimensions: ID x Length (in mm)	90 Å AQ-C18 (2.0 µm)	90 Å AQ-C18 (2.7 µm)	90 Å AQ-C18 (5 µm)
2.1 x 5	91812-122	92812-122	95812-122
3.0 x 5	91813-122	92813-122	95813-122
4.6 x 5		92814-122	95814-122
Guard Column Holder		94900-001	



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