



Operating Instruction Sheet FructoShell-N

Column Description

Product Type: Analytical columns for both HPLC and SFC operations
HILIC Selector: Cyclofructan (CF6) was covalently bonded on 2.7 μm superficially porous particles (SPPs)
Hardware: Idex® (Isobar) with 2 micron (inlet) and 1 micron (outlet) frits
Dimensions: Available in 5/10/15 cm length with 2.1/3.0/4.6 mm I.D.

QC Test Conditions

Sample: Uracil/Adenosine/Cytosine (0.3 mg/mL in mobile phase)
Mobile Phase: 75/25 ACN/25 mM Ammonium acetate for 4.6 mm I.D.
90/10 ACN/100 mM Ammonium acetate for 3.0/2.1 mm I.D.
Temperature: Ambient (23 °C)
Injection Volume: 0.1-0.8 μL
Detection: UV 254 nm

Operation Parameters

Flow Direction: Indicated by column label
Max Pressure: 400 bar for 4.6 mm I.D. columns;
500 bar for 3.0 mm/2.1 mm I.D. columns
Max Flow Rate: Within pressure limits, there is no limit on the flow rate
Temperature: 5-45 °C (allow step-wise increase/decrease @1 °C/min)

Mobile Phase Solvents

This HILIC column can be used in any proportion of organic solvents in buffer without any issue. Allow at least 20 column volumes of conditioning time before injection.



Screening Mobile Phases

HILIC mode: 75/25 ACN/25 mM Ammonium acetate
90/10 ACN/100 mM Ammonium acetate

Optimizations

HILIC mode: Change the ratio of ACN to buffer
Change the concentration of salt

Flow Rate: Change the flow rate according to the retention time

Temperature: Change the temperature

Storage Pure ACN is recommended for long term storage.

Regeneration Flush the column with 50/50, ACN/50 mM ammonium acetate @ lower flow rates for at least 3 hours. Then equilibrate with mobile phase.

Shipment Each column has been QC-tested before shipping. The columns are stored in pure acetonitrile.