

Purospher® RP-18

Polar endcapped column material

Purospher® RP-18 is designed for peak-tailing free chromatography of strongly basic compounds with simple, neutral mobile phases. Thus, method development time and consequently analyses costs are reduced. Additionally, Purospher® RP-18 allows the separation of hydrophilic compounds using up to 100 % aqueous eluents.

The key for understanding the properties of Purospher® RP-18 lies in the chemistry of the base, high purity silica with virtually no metal contaminants present. In addition, multi-step chemical modification and deactivation by polymeric coating and amino shielding of the surface eliminate unpredictable interactions from residual silanols. This results in symmetric peak shapes of basic and chelating analytes without the addition of any modifiers to the mobile phase. Due to the amino endcapping step, Purospher® RP-18 is not suitable for the separation of acidic compounds. The high chemical stability of Purospher® RP-18 permits the usage of mobile phase conditions at pH 8 for a long period of time without decline of performance.

Purospher® RP-18 benefits

- Symmetrical peaks for basic, chelating, and polar analytes
- Fast method development for basic compounds

Specifications of Purospher® RP-18

Sorbent characteristics	High-purity silica particles with C18 modification and deactivation of the surface; amino shielding not suitable for acidic compounds!
Particle shape	spherical
Particle size	5 µm
Pore size	9 nm (90 Å)
Pore volume	1.05 mL/g
Specific surface area	480 m ² /g
Carbon load	17 % C
Efficiency	80,000 N/m
pH range	pH 2 – 8
Shipping eluent	Acetonitrile/Water

Ordering information – Purospher® RP-18, stainless steel cartridges LiChroCART®

Product	Ordering No.	Particle size	Dimension length	Dimension i.d.	Contents of one package
Purospher® RP-18, custom packed	1.50175.7127	5 µm	125 mm	3 mm	1 piece
Purospher® RP-18, custom packed	1.50177.7127	5 µm	250 mm	3 mm	1 piece
Purospher® RP-18	1.50141.0001	5 µm	4 mm	4 mm	10 pieces
Purospher® RP-18, custom packed	1.50171.7127	5 µm	75 mm	4 mm	1 piece
Purospher® RP-18	1.50142.0001	5 µm	125 mm	4 mm	1 piece
Purospher® RP-18	1.50144.0001	5 µm	250 mm	4 mm	1 piece
Purospher® RP-18, custom packed	1.51431.7127	5 µm	250 mm	4.6 mm	1 piece
Purospher® RP-18, custom packed	1.50179.7127	5 µm	250 mm	10 mm	1 piece

The LiChroCART® columns (75, 125, 150 and 250 mm length) in the list above (4 mm i.d.) require part number 1.51486.0001 manu-CART® cartridge column holder, which can be used to hold one cartridge column with or without a 4–4 mm guard column. Additional dimensions available as customized packings see page 366.

► **Purospher® STAR RP-18 endcapped**
The versatility you need!
page 269

► **Purospher® RP-18 endcapped** Excellent peak symmetry with either basic or strongly acidic compounds
page 302

► **LiChrospher® 60 RP-select B** Excellent separations even with basic compounds
page 329

► **Aluspher®**
Alkaline stable HPLC separations
page 345

► **Customized packings**
Always the right column
page 366

Accessories for particulate HPLC columns:

► **manu-CART® cartridge holder** for LiChroCART® cartridges
page 370

► **LiChroCART® cartridge**
Different lengths, different internal diameter
page 373