



Capillaries for Precise Separations of Proteins and Peptides in CE

CelerityCE™ capillaries are manufactured using patented bonding technologies that produce extremely stable Si-C bonds and have a 1,000 fold increase in surface area of the capillary wall/surface. This feature of CelerityCE™ columns increases the chromatographic interactions of the capillary with your **proteins** and peptides during CZE. CelerityCE™ capillaries provide very reproducible separations of your bio-molecules.

Reduced Silanol Sites and Chemical Stability

The CelerityCE™ Capillaries for **Protein Analysis** are first treated with an etching agent increasing the surface area by 1,000 fold. A patented hydrosilation process then virtually eliminates all the silanol sites. Then by the use of a proprietary catalytic process, the walls are then covalently bonded with C18, Diol or Liquid Crystal (Cholesterol). These bonds are less susceptible to acid or base hydrolysis compared to conventional Si-OH bonds since they do not contain the silanol linkage.

Stable Bonding for Stable Separations

The CelerityCE™ capillaries can be used with extremely high organic as well as high or low pH buffer systems.

Secondary Mechanisms of Separation

Bonding C18, Diol and Liquid Crystals to the capillary wall offers the separation scientist advantages of Electrophoresis as well as Chromatography. The reduced EOF generated by the CE instrument is augmented with the hydrophobic or hydrophilic nature of the bonded phase on

- Excellent Choice for Proteins or Peptides
- Patented Bonding Provides Better Stability
- No Frits, No Conditioning Steps

the wall; thus separation is not only based on the mobility differences of your analytes. The high degree of increased surface area of CelerityCE™ capillaries and therefore bonded phase concentration compensates for lower diffusion rates in open tubular coated CEC.

High Plate Counts – Separate Neutrals

CelerityCE™ capillaries are highly efficient and usually have plate counts of over 130,000 N/m on both charged and neutral species. These capillaries produce enough chromatographic interaction so you get separations that do not occur on bare fused silica or capillaries based solely on electrophoretic mobility differences.

Hydrophilic or Hydrophobic

C18 and Liquid Crystal (Cholesterol) offers hydrophobic interaction with hydrophobic analytes while the Diol phase will produce hydrophilic interaction for different chromatographic effects.

Visit www.mtc-usa.com for applications, structure of bonded phase & instructions for use.

Cat. No.	Description	ID	Cat. No.	Description	ID
04918-20	CelerityCE™, C18 (ODS)	20µm	04920-50	CelerityCE™, Diol	50µm
04918-50	CelerityCE™, C18 (ODS)	50µm	04925-20	CelerityCE™, Liquid Crystal	20µm
04920-20	CelerityCE™, Diol	20µm	04925-50	CelerityCE™, Liquid Crystal	50µm

All CelerityCE™ capillaries are 70cm long, 365µm OD, Polyimide coated and are treated for high surface area.