

Capillaries & Accessories for Capillary Electrophoresis

Selection Guide and Catalog

Good CE Begins with the Proper Capillary Surface.

COMPATIBLE WITH:

Agilent 3D™

Beckman P/ACE™, MDQ™ and PA 800™

Prince Technologies

Unimicro TriSep™

Knauer Capline System 2010™

many others including "Home Built"



Manufactured by MicroSolv Technology Corporation Eatontown, NJ USA Since 1992



Capillaries for CE

Bare Fused Silica Capillaries



Supplied on a Convenient Spool

BARE FUSED SILICA CAPILLARIES • Our most popular sizes

- ▶ Tight Dimensional Tolerances: 365µm OD +/-8µm, measured to NIST traceable standards
- ▶ Pressure rated to 15,000 psi
- ▶ Precleaned at the factory with spectroscopy grade Argon
- ▶ Get flatter cuts due to reduced residual stress in the glass and a better polyimide application process
- ▶ Improved Concentricity of Internal Diameter for reproducible flow rates and better CE calculations
- ▶ Stronger than the others in the market

One Meter Length

CAT. NO.	DESCRIPTION	ID X LENGTH
04025-C	Simplus Capillary	25µm x 1M
04050-C	Simplus Capillary	50µm x 1M
04075-C	Simplus Capillary	75µm x 1M
04100-C	Simplus Capillary	100µm x 1M

Ten Meter Length

04051-C	Simplus Capillary <i>Spool</i>	50µm x 10M
04071-C	Simplus Capillary <i>Spool</i>	75µm x 10M

25 Meter Length

04051-C25	Simplus Capillary <i>Spool</i>	50µm x 25M
04071-C25	Simplus Capillary <i>Spool</i>	75µm x 25M

Neutral Coated Capillaries



NEUTRAL COATED CAPILLARIES • Our most popular sizes

- ▶ Eliminate EOF & Minimize Wall Interaction
- ▶ Great for Proteins, Peptides, cIEF or Basic Molecules
- ▶ Covalent LPA Bonding for Stability (Hydrophobic Layer)
- ▶ Great Choice when Separation by Mobility is Desired
- ▶ Compatible with Borate Buffers

Hint: Add hydrophobic polymers in the run buffer to eliminate hydrophobic interactions with the coating.

Compare to Beckman 477441 eCap Neutral Capillary

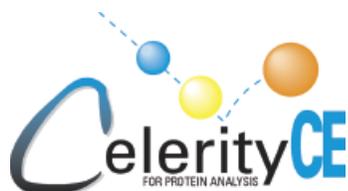
CAT. NO.	DESCRIPTION	ID X LENGTH
04650-ZF	Zero EOF Capillary	50µm x 1M
04675-ZF	Zero EOF Capillary	75µm x 1M
04600-ZF	Zero EOF Capillary	100µm x 1M

Certificate of Analysis provided to show EOF is virtually eliminated.

Not recommended for PDA detectors

Capillaries for CE

Etched Capillaries



ETCHED CAPILLARIES

- ▶ Excellent for CE-MS, LIF or UV Detection Modes
- ▶ Bonded Phases offer Hydrophilic or Hydrophobic Interactions
- ▶ Highly Efficient and Reproducible
- ▶ Silanols Reduced to "Insignificant"

These capillaries are made with an etched internal wall thus increasing the surface area by 1,000 times. A durable, covalently bonded phase is then applied with a relatively high carbon loading producing a capillary capable of electrophoresis and chromatography at the same time.

Exquisite separations are then achieved for hard to separate proteins, peptides or small molecules. The surface of these capillaries can be hydrophilic or hydrophobic. At high pH, these capillaries have a reduced flow and at pH lower than 4.5, the EOF is in the reverse direction.

All Capillaries are 365µm OD and are 70mm Long, supplied without detection windows. Windows can be supplied on special request. 20µm ID not recommended for UV detectors.

CAT. NO.	DESCRIPTION
04908-50	CelerityCE™ Capillary, C8, 50µm ID
04918-50	CelerityCE™ Capillary, C18, 50µm ID
04920-50	CelerityCE™ Capillary, C8-Diol, 50µm ID
04925-50	CelerityCE™ Capillary, Cholesterol, 50µm ID
04935-50	CelerityCE™ Capillary, Butyl-Phenyl, 50µm ID
04908-20	CelerityCE™ Capillary, C8, 20µm ID
04918-20	CelerityCE™ Capillary, C18, 20µm ID
04920-20	CelerityCE™ Capillary, C8-Diol, 20µm ID
04925-20	CelerityCE™ Capillary, Cholesterol, 20µm ID
04935-20	CelerityCE™ Capillary, Butyl-Phenyl, 20µm ID

Controlled Flow Capillaries



CONTROLLED FLOW CAPILLARIES

- ▶ Eliminate change in migration times due to changes in pH
- ▶ Useful when determining pKa, logP and in cIEF or MEKC Separations

Since the pKa of bare fused silica is about 1.5, its ionization is controlled by the pH of the buffer. The coating in the Controlled Flow™ capillaries does not have a pKa and is always ionized. Therefore, the buffer does not control or impact the EOF.

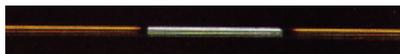
Controlling Electro-Osmotic Flow (EOF) is a vital step toward reproducible CE. Controlled Flow™ capillaries are available in 3 different flow rates. At low pH, all Controlled Flow™ capillaries are faster than bare fused silica capillaries and are very robust. At high pH the flow is slower than bare fused silica which can be a big advantage for separations. EOF is the same at all pH's. These capillaries exhibit superior long term life in CZE and MEKC.

CAT. NO.	DESCRIPTION
04650-HF	Controlled, High EOF Capillary, 50µm x 1M
04675-HF	Controlled, High EOF Capillary, 75µm x 1M
04650-MF	Controlled, Medium EOF Capillary, 50µm x 1M
04675-MF	Controlled, Medium EOF Capillary, 75µm x 1M
04650-LF	Controlled, Low EOF Capillary, 50µm x 1M
04675-LF	Controlled, Low EOF Capillary, 75µm x 1M

Cut these capillaries to fit any commercial CE unit. Easily make windows. Available in one meter lengths for sizing to any CE instrument.

Accessories for CE

Detection Window Maker



DETECTION WINDOW MAKER

- ▶ Easy to use for all Capillaries for CE
- ▶ Stop Wasting Money and Time on Pre-Made Capillaries
- ▶ Takes 10 Seconds to Make a Perfect Window

Create a perfect detection window every time you use this device. Removes the polyimide coating from 365µm OD capillaries for detection by UV and LIF. The Window Maker™ is designed to produce enough heat to burn off the polyimide but not damage the glass in any way. Can be used to remove 1-2mm of the polyimide from the inlet and outlet tips of the capillary.

Shipped with a standard 2mm module for burning the capillary. Other size heating modules are available as accessories.

CAT. NO.	DESCRIPTION
07200-S	Window Maker, 110/120 VAC, US w/2mm Module
07300-S	Window Maker, 220/240 VAC, EU* w/2mm Module*
07301-S	Replacement Heating Module, 1mm Window
07201-S	Replacement Heating Module, 2mm Window
07204-S	Replacement Heating Module, 4mm Window
07207-S	Replacement Heating Module, 7mm Window

* EU unit is CE Marked.

Magnifying Lens



MAGNIFYING LENS

Hand held lens for inspection of capillary ends after cutting them. See if capillaries are clogged or air bubbles are in the capillary. Inspect your window with this 15X magnifier with a built in measuring scale for precision.

CAT. NO.	DESCRIPTION
07210-M	Magnifier, 15X with built in Scale

Capillary Accessories



CAPILLARY ACCESSORIES

Cutters for CE Capillaries are made of ceramic and have a sharp edge and a dull side. When properly used, a suitable cut can be made easily with any capillary. See our website for instructions on how to cut these.

Protective sleeves are available to cover your detection windows during storage. These sleeves keep the window straight and prevents them from cracking. Use with pre-made or self made windows.

CAT. NO.	DESCRIPTION
35301-S	Protective Sleeve for CE Capillaries
10101-T	Cleaving Tiles for cutting CE Capillaries