

How does the Controlled Flow CE capillary work - FAQ

The Controlled Flow™ CE capillary is made from a standard bare fused silica CE capillary but has an inner coating which is covalently bonded with a neutral polymer that has a controlled amount of sulfonic acid groups bonded to it.

These sulfonic acid groups are always 100% ionized regardless of the pH of the ~~buffer~~. so the flow is independent of the ~~buffer~~. The EOF is robust and stronger than that produced by bare fused silica because the sulfonic acid groups produce a more dense negative charge. The EOF is consistent from run to run because of the elimination of local pH differences and changes due to ~~buffer~~ depletion and other causes of EOF instability.

The EOF that is measured by the different High, Medium and Low flow capillaries is produced by the different amounts of sulfonic acid groups. The charge density is highly controlled but different between the 3 types of Controlled Flow Capillaries. This can be very helpful in CIEF.



Click [HERE](#) for Controlled Flow Capillaries ordering information and pictures.

Printed from the Chrom Resource Center

Copyright 2025, All Rights Apply

MicroSolv Technology Corporation

9158 Industrial Blvd. NE, Leland, NC 28451

Tel: (732) 380-8900

Fax: (910) 769-9435

Email: customers@mtc-usa.com

Website: www.mtc-usa.com