

## ***MCI GEL CHP20/C10 Column Handling Instructions***

***MCI GEL CHP20/C10*** packed column provides unique and excellent separation capabilities when used properly. To utilize its maximum performance and to avoid any trouble, please read these instructions and use the column carefully as noted.

MCI GEL CHP20/C10 packed column has been designed for reversed-phase HPLC applications. Its packing material is based on a synthetic polymer which allows usage over a wide pH range and use with aqueous organic solvents. This column will provide excellent separation and short analysis time.

### **1. Column Specifications**

Packing Materials	
Material	ethylstyrene-divinylbenzene copolymer
Particle Size	10 $\mu$ m
Column Dimensions	4.6 mm I.D. x 250 mm H (stainless steel 316L)
Shipping Solvent	50 vol% acetonitrile aq. solution
Maximum Durable Pressure	10 MPa (or 1,428 psi)
Maximum Flow Rate	2.0mL/min

### **2. Column Performance**

#### **Specifications**

Theoretical Plate Number	min. 4,000 / column (Peak component, dipropyl phthalate)
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#### **(Quality Control Condition)**

Eluent	50 vol% acetonitrile aq. solution
Flow Rate	1.00 mL/min
Column Temperature	60 C <sup>o</sup> (or 140 F <sup>o</sup> )
Detector	UV254nm
Sample	10 $\mu$ L containing 1000 ppm each of: dimethyl phthalate diethyl phthalate dipropyl phthalate

### **3. Important Cautions**

- (1) Available Solvent as Eluent:

Organic Solvent	Available Concentration in water
Acetonitrile	0 – 100 vol%
Methanol	
Tetrahydrofuran (THF)	
Acetone	
Ethanol	

- (2) Eluent pH Range: 1 – 13
- (3) Eluent must be filtered with 0.45 µm filter and degassed before use.
- (4) Eluent must be pumped only in the direction shown on the column. Please control the flow rate to start with 0.1mL/min and increase gradually.
- (5) Sample solution should be filtered with <0.45 µm filter before injection. Any suspended particles and undissolved solids trapped or adsorbed in the column will shorten the column life.
- (6) When changing organic solvent concentration in the eluent, please apply gradient method.
- (7) When disconnecting the column from HPLC instrument, please  
(1) avoid leaving the solution in the column during storage, and  
(2) cap both column ends tightly to prevent the packing material from drying.

*If you have any further questions, please contact your local vendor or following.*

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