

MCIGEL™ CHP20/P30 and CHP50/P30

MCIGEL™ CHP20/P30 and CHP50/P30 is based on a unique 30um rigid polystyrene/ divinylbenzene matrix. A controlled pore size distribution and large surface area offer excellent resolution and the capacity for a wide range of molecules, from small peptides and oligonucleatides up to large proteins. Following tables and pages include specification and supporting data.

CHP20/P30 and CHP50/P30 are characterized by:

- >> Wide pH operation range
- >> Excellent batch-to-batch reproducibly
- >> Wide application
- >> High chemical stability
- >> Excellent pressure/flow characteristics

Physical and chemical properties

Grade name		MCIGEL™ CHP20/P30	MCIGEL™ CHP50/P30
Bead form		Rigid, spherical, porous	Rigid, spherical, porous
Matrix		Polystyrene/ divinylbenzene	Polystyrene/ divinylbenzene
Recommended pH		All range (1 to 14)	All range (1 to 14)
Mode Diameter	µm	25.0-35.0	25.0-35.0
Within Mode Diameter	±5.0µm	40min	40min
Within Mode Diameter	±10.0µm	70min	70min
Moisture Content		70.0—90.0	60.0-80.0
Particle Size Distribution (report)	vol%	-15.0	-15.0
		15.0—20.0	15.0-20.0
		20.0—25.0	20.0-25.0
		25.0—30.0	25.0-30.0
		30.0—35.0	30.0-35.0
		35.0—40.0	35.0-40.0
		40.0—45.0	40.0-45.0
		45.0—	45.0-
Apparent Density*	g/l-R	764	650
Specific Surface Area*	m ² /g	515	543
Specific Pore Volume*	ml/g	1.83	1.47
Pore Radius*	Å	171	137

Note: properties with a mark "*" are referential data .



MCIGEL™ CHP20/P30 and CHP50/P30

>> Wide pH stability

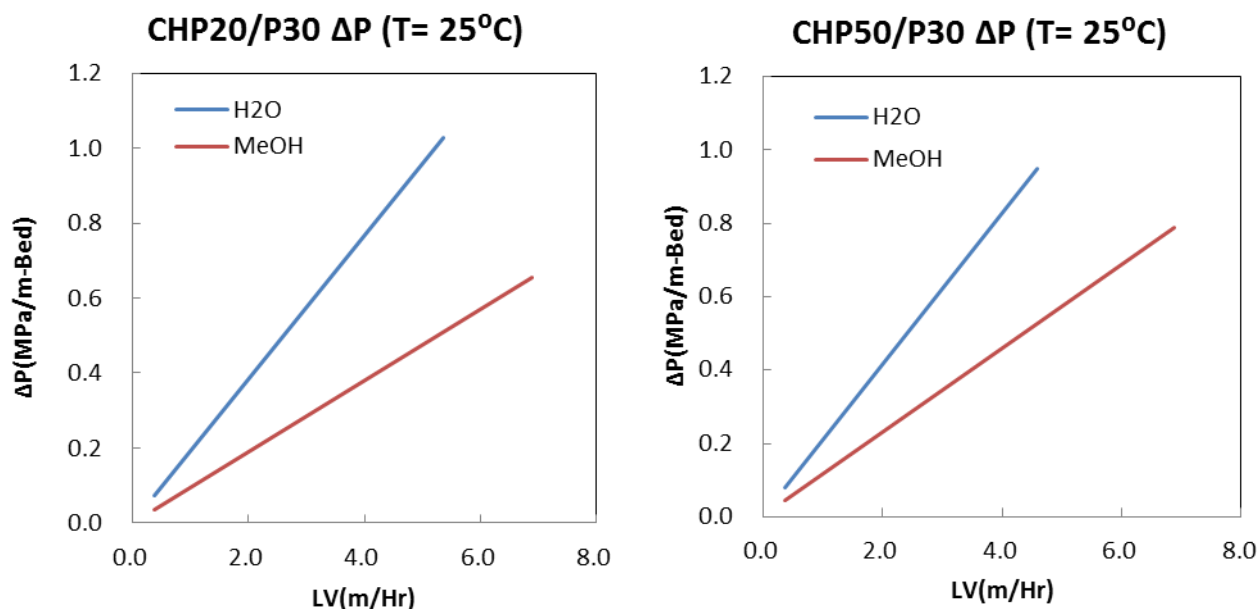
The polystyrene divinylbenzene matrix provides MCIGEL™ CHP20/P30 and CHP50/P30 with chemical stability over a wide pH range. With both an operating and a cleaning ranges cover all pH 1 to 14, both products has broad flexibility in the choice for running conditions and cleaning procedures.

>> Batch-to-batch reproducibility

The combination of a unique manufacturing process and high quality assurance standards results in reproducible bath-to-batch quality. The process gives consistent pore and bead structure, both within and between batches under a strict quality control. All manufacturing is regulated under ISO9001.

>> Excellent pressure/ flow characteristics

CHP20/P30 and CHP50/P30 is composed of 30um diameter beads, spherical in shape and free from broken beads, fragments, and fines. This results in stable and densely packed beds with excellent hydraulic properties shown in the graphs below.

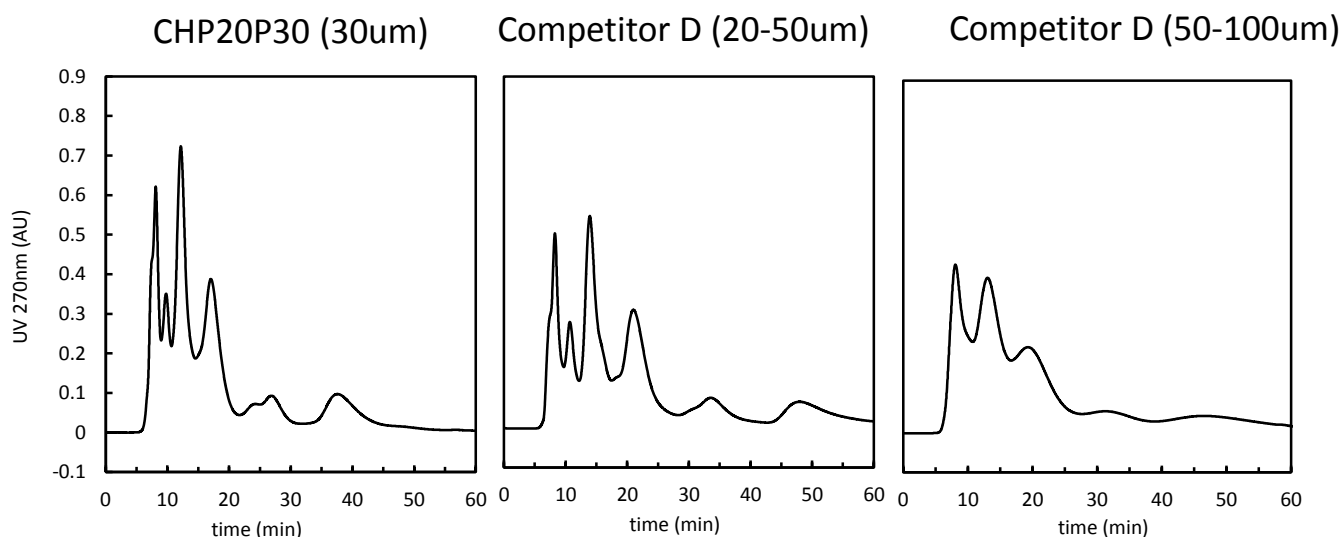


MCIGEL™ CHP20/P30 and CHP50/P30

>> Wide application

example: Chromatographic separation of Senna Pulv. Extract
on polystyrenic adsorbents with various particle sizes

Chromatographic data below shows comparative example of MCIGEL CHP20/P30 against other products available on market.



(A) Adsorbent, CHP20/P30 (30mm); Column size, 250mm x 10mm I.D.;
Eluent, MeOH/1% Acetic acid=60/40; Flow rate, 2.40ml/min.
Sample: Extract of Senna Pulv. Injection: 80ul.

(B) Adsorbent, Competitor D (20-50mm); Column size, 250mm x 10mm I.D.;
Eluent, MeOH/1% Acetic acid=60/40; Flow rate, 2.40ml/min.
Sample: Extract of Senna Pulv. Injection: 80ul.

(C) Adsorbent, Competitor D (50-100mm); Column size, 250mm x 10mm I.D.;
Eluent, MeOH/1% Acetic acid=60/40; Flow rate, 2.40ml/min.
Sample: Extract of Senna Pulv. Injection: 80ul.

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