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OPERATING CONDITIONS and SPECIFICATIONS

TSKgel [®] CM-5PW Products

Small Ion Capacity:		> 0.1 meq/mL	Counter Ion: Na⁺		
	0014012	20.0 mm ID x 15.0 cm L	Glass	13 µm	
Analytical/Semi-Prep:	0013068	7.5 mm ID x 7.5 cm L	Guardael Kit	10 µm	

This sheet contains the recommended operating conditions and the specifications for **TSKgel** CM-5PW columns and guard columns. Installation instructions and column care information are described in a separate Instruction Manual.

A. OPERATING CONDITIONS

1.	Shipping Solvent:	Distilled and Deionized Water			
2.	Max.Flow Rate:		1.2 8.0	mL/min mL/min	7.5 mm ID x 7.5 cm L 20.0 mm ID x 15.0 cm L Glass
	NOTE:			When a buffer with high viscosity is used, the maximum flow rate may have to be reduced so as not to exceed the maximum pressure drop. When changing solvents, use a flow rate equal to 25% of the maximum flow rate.	
3.	Standard Flow Rate:		0.5 - 1.0 4.0 - 6.0	mL/min mL/min	7.5 mm ID x 7.5 cm L 20.0 mm ID x 15.0 cm L Glass
4.	Max. Pressure:		1.5	MPa	7.5 mm ID and 20.0 mm ID Glass
5.	pH Range:		2.0 - 12.0		
6.	Salt Conc.:		<u><</u> 0.5 Molar		
7.	Organic Conc.:		<u><</u> 20%		
8.	Temperature:		<u><</u> 30°C	Reduce	flow rate when operating below 10 °C.
9.	Cleaning Solvents:			(1) 0.1 - (2) 20 - (3) Aque (4) Urea	 0.2 M NaOH, and, if not successful, 40% acetic acid aq., or sous buffer in organic solvent, or if nothing else was successful, or nonionic surfactant in buffer.
	NOTE:			Clean the in 250µl Use prop	e column regularly by injecting up to one column volume of 0.1 - 0.2 N NaOH increments. portionally larger volumes for (semi-) prep columns.
10.	Storage:	Store the column in DI water when it will not be used the next day or 20% ethanol or methanol in DI water for longer term storage. For overnight storage flush the column with the low salt concentration mobile phase at low flow rate. Prevent air from entering the column!			
11.	Column Protection:			The use column. guard co when the	of guard columns is recommended to prolong the life of the analytical Guard column life depends greatly on sample cleanliness. As a general rule, lumns should be replaced when the peaks become excessively wide, or e peaks show splitting.
B. SPECIFICATIONS		Th Sh	The performance of TSKgel CM-5PW columns is tested under the conditions described in the Data Sheet. All columns have passed the following quality control specifications		
Number of Theoretical Plates (N): \geq 1,300 \geq 2,500		7.5 mm 20.0 mm	ID ID Glass		
	Asymmetry Factor (AF):		0.8 - 1.6		

Note our technical hotline tel +49 6155 70437-36 and e-mail, techsupport.tbg@tosoh.com