TSK-GEL® STAT Series Cation Exchange Products

Part Numbers:

21963, TSKgel SP-STAT, 3mm ID X 3.5cm, 10µm
21964, TSKgel SP-STAT, 4.6mmID x 10cm, 7µm
21965, TSKgel CM-STAT, 3mm ID X 3.5cm, 10µm
21966, TSKgel CM-STAT, 4.6mm ID X 10cm, 7µm

This sheet contains the recommended operating conditions and the specifications for TSK-GEL STAT Series Cation Exchange columns. Installation instructions and column care information are described in a separate Instruction Manual.

A. OPERATING CONDITIONS

1.	Shipping Solvent:	Ion-Exchanged Water
2.	Standard Flow Rate:	1.0 – 2.0mL/min (P/N 21963) 0.5 – 1.4mL/min (P/N 21964) 1.0 – 2.0mL/min (P/N 21965) 0.5 – 1.4mL/min (P/N 21966) 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.
3.	Max. Pressure:	10Mpa (P/N 21963) 10Mpa (P/N 21964) 10Mpa (P/N 21965) 10Mpa (P/N 21966)
4.	pH Range:	3.0 - 10.0 (pH above 10 can only be used for a short time)
5.	Organic Conc.:	<50%. When solvent in column is replaced by distilled or ion-exchanged water, feed the solvent slowly, at flow rates <0.5mL/min (SP-STAT and CM-STAT).
6.	Temperature:	10 - 60°C.
7.	Cleaning Solvents:	Adsorbed materials can be stripped from the column by repeated injection with one of the following cleaning solutions: (1) 0.1mol/L NaOH, or (2) 20 ~ 40% Acetic acid, or (3) Solution containing aqueous organic solvent such as methanol or acetonitrile, or (4) Solution containing a solubilizer such as urea and non-ionic surfactants
8.	Storage:	Short term storage: keep the column filled with low ionic strength eluent. For long term storage, replace the solvent in the column with distilled or ion-exchanged water, at flow rates <0.5mL/min (SP-STAT and CM-STAT).

B. SPECIFICATIONS

The performance of TSK-GEL SP-STAT and TSK-GEL CM-STAT columns are tested under the conditions described in the Data Sheet. All columns have passed the following quality control specifications:

1.	Number of Theoretical Plates (N):	≥ 200 (P/N 21963) ≥ 2,000 (PN 21964) ≥ 200 (PN 21965) ≥ 2,000 (PN 21966)
2.	Asymmetry Factor (AF):	0.8 – 1.8 (P/N 21963) 0.8 – 1.8 (PN 21964) 0.8 - 1.8 (PN 21965) 1.0 - 2.0 (PN 21966)