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OPERATING CONDITIONS and SPECIFICATIONS

TSKgel® STAT Series Cation Exchange Products

Part Numbers:	0021963	3.0 mm ID x 3.5 cm L	TSKgel SP-STAT	10 µm
	0021964	4.6 mm ID x 10.0 cm L	TSKgel SP-STAT	7µm
	0021965	3.0 mm ID x 3.5 cm L	TSKgel CM-STAT	10 µm
	0021966	4.6 mm ID x 10.0 cm L	TSKgel CM-STAT	7µm

This sheet contains the recommended operating conditions and the specifications for **TSKgel** 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 - 2.0	mL/min	P/N 0021963
0.5 - 1.4	mL/min	P/N 0021964
1.0 - 2.0	mL/min	P/N 0021965
0.5 - 1.4	mL/min	P/N 0021966

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. Max. Pressure: 10 MPa

4. pH Range: 3.0 - 10.0 pH above 10 can only be used for a short time

5. Salt Conc.: No Limitation

6. Organic Conc.: <50% When solvent in column is replaced by distilled or ion-exchanged water, feed the solvent slowly, at flow rates < 0.5 mL/min (SP-STAT and CM-STAT).

7. Temperature: 10 - 60°C

8. Cleaning Solvents: Adsorbed materials can be stripped from the column by repeated injection with one of the following cleaning solutions:

- (1) 0.1 M 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

9. 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 < 0.5 mL/min (SP-STAT and CM-STAT).

B. SPECIFICATIONS

The performance of **TSKgel** SP-STAT and **TSKgel** CM-STAT 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):	≥	200	P/N 0021963
	≥	2,000	P/N 0021964
	≥	200	P/N 0021965
	≥	2,000	P/N 0021966

Asymmetry Factor (AF):	0.8 - 1.8	P/N 0021963
	0.8 - 1.8	P/N 0021964
	0.8 - 1.8	P/N 0021965
	1.0 - 2.0	P/N 0021966