

TSK-GEL® Lipopropak XL Products

Part Numbers:	18557, Lipopropak XL, 7.8mm ID X 30cm	18059, Guardcolumn, 6mm ID x 4cm
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This sheet contains the recommended operating conditions and the specifications for TSK-GEL Lipopropak XL columns and guard columns. Installation instructions and column care information are described in a separate Instruction Manual.

A. OPERATING CONDITIONS

- Shipping Solvent: TSKeluent (aqueous). Replace with appropriate mobile phase.
- Max. Flow Rate: 1.0 mL/min

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 50% of the maximum flow rate.
- Standard Flow Rate: 0.5 - 0.6 mL/min.
Maximum Flow Rate: 1.0 mL/min
- Max. Pressure: $25 \text{ kg/cm}^2 = 250 \text{ psi} = 2.5 \text{ MPa}$
- pH Range: 2.0 - 12.0
- Salt Conc.: $\leq 0.5 \text{ Molar}$
- Organic Conc.: $\leq 20\%$
- Temperature Range: 20 - 30°C
- Cleaning Solvents: (1) 0.1 - 0.2M NaOH, and, if not successful,
(2) 20 - 40% acetic acid aq., or
(3) Aqueous buffer in organic solvent, or
(4) Urea or nonionic surfactant in buffer.

NOTE: Clean the column regularly by injecting up to one column volume 0.1 - 0.2M NaOH in 250µL - 2mL increments.

- Storage: Store the column in DI water when it will not be used the next day. For overnight storage flush the column with the low salt concentration mobile phase at low flow rate. Prevent air from entering the column!
- Column Protection: The use of guard columns is recommended to prolong the life of the analytical column. Guard column life depends greatly on sample cleanliness. As a general rule, guard columns should be replaced after every 30 - 40 sample injections, when the peaks become excessively wide, or when the peaks show splitting.

B. SPECIFICATIONS

The performance of TSK-GEL Lipopropak XL columns is tested under the conditions described in the Data Sheet. All columns have passed the following quality control specifications:

- Number of Theor. Plates (N): $> 10,000$
- Asymmetry Factor (AF): 0.8 - 1.4