

TSK-GEL® SuperQ-5PW Products

Part Numbers:	18257, 7.5mm ID x 7.5cm, 10 μ m	18388, guardgel kit for PN 18257
	18386, 8.0mm ID Glass x 7.5cm, 10 μ m	18389, guardgel kit for PN 18386
	18387, 21.5mm ID x 15cm, 13 μ m	18390, guardgel kit for PN 18387
Small Ion Capacity:	> 0.13 eq/L	Counter Ion: Cl ⁻

This sheet contains the recommended operating conditions and the specifications for TSK-GEL SuperQ-5PW column. Installation instructions and column care information are described in a separate Instruction Manual.

A. OPERATING CONDITIONS

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| 1. Shipping Solvent: | Column: Distilled and Deionized Water
Guardgel Kit: 50%Methanol/50% Water |
| 02. Max. Flow Rate: | 1.2 mL/min (8.0mm ID, glass and 7.5mm ID, SS)
8.0 mL/min (21.5mm ID x 15cm)
When changing solvents, use a flow rate equal to 50% of the maximum flow rate. |
| 03. Standard Flow Rate: | 0.5 - 1.0 mL/min (8.0mm ID, glass and 7.5mm ID, SS)
4.0 - 6.0 mL/min (21.5mm ID x 15cm) |
| 04. Max. Pressure: | 1.0 MPa (8.0mm ID glass x 7.5cm)
2.0 MPa (7.5mm ID x 7.5cm and 21.5mm ID x 15cm) |
| 05. pH Range: | 2.0 - 12.0 |
| 06. Salt Conc.: | ≤ 0.5 mol/L |
| 07. Organic Conc.: | ≤ 20% |
| 08. Temperature: | 10 - 45°C - Reduce flow rate when operating below 10°C. |
| 09. Cleaning Solvents: | (1) 0.1 - 0.2mol/L NaOH, and, if not successful,
(2) 20 - 40% acetic acid aq., or
(3) Aqueous buffer in 30% acetonitrile or methanol, or
(4) Urea or nonionic surfactant in buffer. |

NOTE: Clean the column regularly by injecting up to one column volume 0.1 - 0.2mol/L NaOH in 250 μ l increments.

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| 10. 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 10 - 20% of the maximum flow rate. Prevent air from entering the column! |
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B. SPECIFICATIONS

The performance of TSK-GEL SuperQ-5PW column is tested under the conditions described in the Data Sheet. All columns have passed the following quality control specifications:

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| 01. Number of Theoretical Plates (N): | ≥ 1,300 (8.0mm ID & 7.5mm ID)
≥ 3,000 (21.5mm ID) |
| 02. Asymmetry Factor (AF): | 0.8 - 1.6 |