

TSKgel® Boronate-5PW Products

Part Numbers:	13066, 7.5 mm ID x 7.5 cm, 10 µm	13125, Guardgel Kit for P/N 13066, 20 µm
	14449, Glass, 5.0 mm ID x 5.0 cm, 10 µm	14451, Guardgel Kit, Glass, for P/N 14449, 20 µm

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

A. OPERATING CONDITIONS	
1. Shipping Solvent:	Distilled Water
2. Max. Flow Rate:	1.2 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 drop. When changing solvents, use half the maximum flow rate.
3. Standard Flow Rate:	0.5 - 1.0 mL/min
4. Max. Pressure:	1 MPa (7.5 mm ID x 7.5 cm) 2 MPa (5.0 mm ID Glass x 5.0 cm)
5. pH Range:	2.0 - 9.0
6. Salt Conc.:	≤ 3 mol/L
7. Organic Conc.:	≤ 20%
8. Temperature:	≥ 0 °C
9. Cleaning Solvents:	(1) 0.1 - 0.2 mol/L NaOH, or (2) Urea or non-ionic surfactant in buffer, or (3) Aqueous buffer in organic solvent, or (4) 20 - 40% acetic acid aqueous
NOTE:	Clean the column regularly by injecting up to one column volume 0.1 - 0.2 mol/L NaOH in 250 – 500 µL increments.
10. Storage:	Store the column in the shipping solvent at about 4-10 °C when it will not be used the next day. For overnight storage flush the column with the mobile phase at 0.2 mL/min. Prevent air from entering the column!
11. 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 TSKgel Boronate-5PW columns is tested under the conditions described in the Data Sheet. All columns have passed the following quality control specifications:	
1. Number of Theoretical Plates (N):	≥ 1,300 (7.5 mm ID x 7.5 cm) ≥ 500 (5.0 mm ID Glass x 5.0 cm)
2. Asymmetry Factor (AF):	1.0 - 2.0 (7.5 mm ID x 7.5 cm) 1.0 - 3.0 (5.0 mm ID x 5.0 cm)

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