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OPERATING CONDITIONS and SPECIFICATIONS

TSKgel® Phenyl-5PW RP Products

Part Numbers:	0018756	2.0 mm ID x 7.5 cm L	10 µm
	0008043	4.6 mm ID x 7.5 cm L	10 µm
	0014126	3.2 mm ID x 1.5 cm L	Guard Cartridge for PN 0008043
	0014007	8.0 mm ID x 7.5 cm L	Glass
	0016260	21.5 mm ID x 15.0 cm L	13 µm

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

A. OPERATING CONDITIONS

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|----------------------|--------------------------|--------------|-----------|
| 1. Shipping Solvent: | 30% Methanol - 70% Water | | |
| 2. Max.Flow Rate: | 0.12 mL/min | 2.0 mm ID x | 7.5 cm L |
| | 1.20 mL/min | 4.6 mm ID x | 7.5 cm L |
| | 2.50 mL/min | 8.0 mm ID x | 7.5 cm L |
| | 8.00 mL/min | 21.5 mm ID x | 15.0 cm L |

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.

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|------------------------|--------------------|--------------|-----------|
| 3. Standard Flow Rate: | 0.05 - 0.10 mL/min | 2.0 mm ID x | 7.5 cm L |
| | 0.50 - 1.00 mL/min | 4.6 mm ID x | 7.5 cm L |
| | 1.00 - 2.00 mL/min | 8.0 mm ID x | 7.5 cm L |
| | 6.00 - 8.00 mL/min | 21.5 mm ID x | 15.0 cm L |
| 4. Max. Pressure: | 1 MPa | 2.0 mm ID x | 7.5 cm L |
| | 3 MPa | 4.6 mm ID x | 7.5 cm L |
| | 2 MPa | 8.0 mm ID x | 7.5 cm L |
| | 3 MPa | 21.5 mm ID x | 15.0 cm L |

5. pH Range: 2.0 - 12.0

6. Organic Conc.: 0 - 100%

7. Temperature: 4 - 60°C

8. Cleaning Solvents:
- (1) Acetonitrile or Methanol, or
 - (2) Aqueous buffer in organic solvent, or
 - (3) 0.1 - 0.2M NaOH, or
 - (4) 20 - 40% acetic acid aq.

NOTE:

Clean the column regularly by injecting up to one column volume of 0.1 - 0.2M NaOH in 250 µl increments.

9. Storage: Store the column in shipping solvent 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!

10. 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** Phenyl-5PW RP 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):	≥ 700	8.0 mm ID x 7.5 cm L Glass
	≥ 500	4.6 mm ID x 7.5 cm L
	≥ 400	2.0 mm ID
	≥ 1000	21.5 mm ID x 15.0 cm L
Asymmetry Factor (AF):	0.8 - 1.6	2.0 mm ID and 4.6 mm ID
	1.0 - 2.0	glass columns
	0.8 - 1.8	21.5 mm ID x 15.0 cm L