

TSK-GEL® ODS-80T_S Products

Part Numbers:	18150, 2.0mm ID x 15cm, 5µm	19308, Guard Cartridge Holder, for 2mm ID columns
	18151, 2.0mm ID x 25cm, 5µm	19325, Guard Cartridge, 2mm x 1cm, 5µm
	17200, 4.6mm ID x 7.5cm, 5µm	14100, Guard Cartridge holder for 3.2mm ID cartridges
	17201, 4.6mm ID x 15cm, 5µm	17242, TSK Guard Cartridge*, 1.5cm x 3.2mm ID, for PN 17200, 17201, & 17202, 5µm
	18520, 4.6mm ID x 15cm, 5µm	
	17202, 4.6mm ID x 25cm, 5µm	
	17380, 21.5mm ID x 30cm, 10µm	17385, TSK Guard column, 21.5mm ID x 7.5cm, 10µm
	14594, Pre-injector membrane filter holder, SS	
	03409, 13mm Nylon Membrane filter, 0.45µm, for PN 14594	

This sheet contains the recommended operating conditions and the specifications for TSK-GEL ODS-80T_S columns and Guardcolumns. Installation instructions and column care information are described in a separate Instruction Manual.

A. OPERATING CONDITIONS

- Shipping Solvent: 70% Methanol - 30% Water
- Max. Flow Rate: 0.22 mL/min (2.0mm ID)
1.2 mL/min (4.6mm ID)
12.0 mL/min (21.5mm ID)

When a buffer with high viscosity is used, the maximum flow rate may have to be reduced so it doesn't exceed the maximum pressure drop. When changing solvents, use a flow rate equal to 25% of the maximum flow.
- Standard Flow Rate: 0.15 - 0.18 mL/min (2.0mm ID)
0.8 - 1.0 mL/min (4.6mm ID)
4.0 - 6.0 mL/min (21.5mm ID)
- Max. Pressure: 100 kg/cm² = 1500 psi (4.6mm ID x 7.5cm)
200 kg/cm² = 3000 psi (4.6mm ID x 15cm, 2.0mm ID x 15cm)
300 kg/cm² = 4500 psi (4.6mm ID x 25cm, 2.0mm ID x 25cm)
60 kg/cm² = 900 psi (21.5mm ID x 30cm)
- pH Range: 2.0 - 7.5
- Salt Conc. Range: No limitation
- Organic Conc. Range: No limitation
- Temperature: 10 - 50°C. Reduce flow rate when operating below 10°C.
- Cleaning Solvents: (1) High conc. solvent containing organic modifiers*
(2) Mixture of organic acids and high conc. organic modifiers*

*Acetonitrile and methanol are recommended as a modifier.
- Storage: Store the column in the shipping solvent if it will not be used within three days. Prevent air from entering the column. For overnight storage flush the column with mobile phase at 0.2mL/min.
- Column Protection: An on-line filter (0.2-0.5µm) equipped between pump and injection valve is recommended. Guard columns prevent the column from a contamination of strongly adsorbed solutes. As a general rule, guard columns should be replaced after 30-40 sample injections or when peaks become excessively wide.

B. SPECIFICATIONS

The performance of TSK-GEL ODS-80T_S column is tested under the conditions described in the data sheet. All columns have passed the following quality control specifications:

- Number of Theoretical Plates (N): ≥ 4,500 (7.5 cm columns)
≥ 11,000 (15cm columns)
≥ 18,000 (25 cm columns)
≥ 6,000 (30cm columns)
- Asymmetry Factor (AF): 0.7 - 1.8 (4.6 mm ID & 21.5 mm ID)
0.8 - 1.6 (2.0 mm ID)

DS1103 Revised 22SEPTEMBER 2004

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