



Zettachring 6, 70567 Stuttgart, Germany
 Tel: +49-711-13257-0 Fax: +49-711-13257-89
 E-Mail: info.sep.eu@tosoh.com
 Web: www.tosohbioscience.com

3604 Horizon Drive, Suite 100, King of Prussia, PA 19406, USA
 Tel: +1 800-366-4875 Fax: +1 610-272-3028
 E-Mail: info.sep.am@tosoh.com
 Web: www.tosohbioscience.com

OPERATING CONDITIONS and SPECIFICATIONS

TSK-GEL® ODS-80TS Products

Part Numbers:	18150	2.0 mm ID x 15.0 cm L	5 µm
	18151	2.0 mm ID x 25.0 cm L	5 µm
	17200	4.6 mm ID x 7.5 cm L	5 µm
	17201	4.6 mm ID x 15.0 cm L	5 µm
	17202	4.6 mm ID x 25.0 cm L	5 µm
	17380	21.5 mm ID x 30.0 cm L	10 µm
	17385	21.5 mm ID x 7.5 cm L	10 µm
	18206		
	18207		
			TSKGuardcolumn Guard Filter Holder Guard Filter (pk3)

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

1. Shipping Solvent: 70% Methanol - 30% Water
2. Max.Flow Rate:

0.22 ml/min	2.0 mm ID
1.20 ml/min	4.6 mm ID
12.00 ml/min	21.5 mm ID

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.

3. Standard Flow Rate:

0.15 - 0.18 ml/min	2.0 mm ID
0.80 - 1.00 ml/min	4.6 mm ID
4.00 - 6.00 ml/min	21.5 mm ID
4. Max. Pressure:

100 kg/cm ²	=	psi	4.6 mm ID x 7.5 cm L
200 kg/cm ²	=	psi	4.6 mm ID x 15.0 cm L and 2.0 mm ID x 15.0 cm L
300 kg/cm ²	=	psi	4.6 mm ID x 25.0 cm L and 2.0 mm ID x 25.0 cm L
60 kg/cm ²	=	psi	21.5 mm ID x 30.0 cm L

5. pH Range: 2.0 - 7.5
6. Salt Conc.: No limitation
7. Organic Conc.: No limitation
8. Temperature: 10 - 50°C Reduce flow rate when operating below 10°C.
9. Cleaning Solvents:
 - (1) High conc. solvent containing organic modifiers*
 - (2) Mixture of organic acids and high conc. organic modifiers*

NOTE: *Acetonitrile and methanol are recommended as a modifiers

10. 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 0.2 ml/min (4.6 mm ID) or 0.05 ml/min (2.0 mm ID) respectively.
11. Column Protection: An on-line filter (0.2-0.5 µm) equipped between pump and injection valve is useful. Also Guardcolumns prevent the column from a contamination of strongly adsorbed solutes. As a general rule, Guardcolumns should be replaced after 30-40 sample injections or when peaks become excessively wide.

B. SPECIFICATIONS

The performance of TSK-GEL ODS-80T_s 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):	≥	4,500	7.5 cm columns
	≥	11,000	15.0 cm columns
	≥	18,000	25.0 cm columns
	≥	6,000	30.0 cm columns
Asymmetry Factor (AF):		0.7 - 1.8	4.6 mm ID and 21.5 mm ID
		0.8 - 1.6	2.0 mm ID