



Im Leuschnerpark 4, 64347 Griesheim, Germany  
 Tel: +49 6155-7043700 Fax: +49 6155-8357900  
 E-Mail: info.tbg@tosoh.com  
 Web: www.tosohbioscience.de

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

## OPERATING CONDITIONS and SPECIFICATIONS

### TSKgel® ODS-120T Products

<b>Part Numbers:</b>	0018152	2.0 mm ID x 15.0 cm L	5 µm
	0018153	2.0 mm ID x 25.0 cm L	5 µm
	0007637	4.6 mm ID x 15.0 cm L	5 µm
	0007125	4.6 mm ID x 25.0 cm L	5 µm
	0007130	7.8 mm ID x 30.0 cm L	10 µm
	0007134	21.5 mm ID x 30.0 cm L	10 µm
	0007642	21.5 mm ID x 7.5 cm L	Guardcolumn, 120 A/T

This sheet contains the recommended operating conditions and the specifications for TSKgel ODS-120T columns. 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
3.00 mL/min	7.8 mm ID
12.0 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
1.00 - 2.00 mL/min	7.8 mm ID
3.00 - 6.00 mL/min	21.5 mm ID
4. Max. Pressure:
 

15 MPa	15.0 cm L column
20 MPa	25.0 cm L column
7.5 MPa	7.8 mm ID
6 MPa	21.5 mm ID
5. pH Range: 2.0 - 7.5
6. Organic Conc.: 0 - 100%
7. Temperature: 10 - 50°C Reduce flow rate when operating below 10°C
8. Cleaning Solvents:
  - (1) Acetonitrile or Methanol, or
  - (2) gradient from 10% to 100% acetonitrile in 0.05% trifluoroacetic acid
9. Storage: Store the column in acetonitrile or methanol when it will not be used the next day. For overnight storage flush the column with the mobile phase at 0.2 ml/min.
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 or when the peaks become excessively wide or when the peaks show splitting.

#### B. SPECIFICATIONS

The performance of TSKgel ODS-120T 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):	≥ 6,500	2.0 mm ID x 15.0 L cm column
	≥ 7,000	15.0 cm L column
	≥ 10,000	25.0 cm L column
	≥ 6,000	7.8 mm ID and 21.5 mm ID column
Asymmetry Factor (AF):	0.8 - 1.7	2.0 mm ID
	0.7 - 1.8	4.6 mm ID and 6.0 mm ID
	0.7 - 1.9	7.8 mm ID and 21.5 mm ID