



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

OPERATING CONDITIONS and SPECIFICATIONS

TSKgel® Octadecyl-NPR™ Products

Part Numbers:	0014005	4.6 mm ID x 3.5 cm L	2.5 µm
Accessories:	0003410	Pre-Column Filter with 0.5 micron SS Frit	
	0003411	Replacement 0.5 µ Frits, for 03410, pk 10	

This sheet contains the recommended operating conditions and the specifications for **TSKgel** Octadecyl-NPR column. Installation instructions and column care information are described in a separate Instruction Manual.

A. OPERATING CONDITIONS

- Shipping Solvent: 70% Methanol - 30% Water (v/v)
- Max. Flow Rate: 1.6 mL/min
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.
- Standard Flow Rate: 1.0 - 1.5 mL/min
- Max. Pressure: 20 MPa
- pH Range: 2 - 12 pH above 12 or below 2 can only be used for a short time
- Salt Conc.: ≤ 0.5 M
- Organic Conc.: 0 - 100%
- Temperature: 0 - 60 °C
- Cleaning Solvents:
 - (1) Acetonitrile or Methanol, or
 - (2) Aqueous buffer in organic solvent
 - (3) 0.1 - 0.2 M NaOH, or
 - (4) 20 - 40% acetic acid aq., or
 - (5) 60% Acetonitrile/40% 0.2 M NaOH**NOTE:** Clean the column regularly by injecting up to one column volume cleaning solution in 100 - 250 µL increments.
- Storage: Store the column in the 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. Avoid air to enter the column!
- Column Protection: No guard column is available for the **TSKgel** Octadecyl-NPR column. Be sure to use a filter after the injector with 0.5 micron pores to avoid frequent plugging of the one micron pore size NPR column frit. We also recommend a pre-injector membrane filter to prevent particles from pump seal wear to reach the column.
NOTE: Use high quality reagents, water and solvents for preparing buffers. Fouling of the resin, leading to a loss in retention and/or efficiency occurs faster due to the small surface area of non-porous resin particles.

B. SPECIFICATIONS

The performance of **TSKgel** Octadecyl-NPR 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):	≥ 1000
Asymmetry Factor (AF):	1.0 - 2.0

Note our technical hotline tel +49 6155 70437-36
and e-mail, techsupport.tb@tosoh.com