TOSOH BIOSCIENCE

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

TSK-GEL® SCX (H+) Products

Part Numbers:	0007158	7.8 mm ID x 30.0 cm L	SCX (H+)	**5 µm**

Functional Group: $-SO_3H$

Small Ion Capacity: > 1.5 meq/ml

This sheet contains the recommended operating conditions and the specifications for **TSKgel** SCX (H+) columns. The column contains porous, spherical, polystyrene particles based on TSKgel G2000H packing material. SCX (H+) columns are mainly applied to the analysis of isomerized sugars, alcohols and lower organic acids.
Installation instructions and column care information for **TSKgel** are described in a separate Instruction Manual.

A. OPERATING CONDITIONS

1.	Shipping Solvent:	Distilled deionized water	
2.	Max.Flow Rate:	1.2	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.
3.	Standard Flow Rate:	0.5 - 1.0	mL/min
4.	Max. Pressure:	5	MPa
5.	pH Range:	2 - 14	
6.	Organic Conc.:	< 20%	Solvent changes can result in swelling of the polymer backbone.
7.	Temperature:	10 - 45°C	
		15 - 30°C	Recommended for storage.
8.	Cleaning Solvents:		(1) 5 mM H_2S0_4, 5 mM HClO4, or 0.1% Phosphoric Acid (2) 20% Organic Modifier (3) 20% Acetic Acid
9.	Storage:		Store the column in distilled and deionized water at acidic pH (room temperature) when it will not be used the next day. Overnight the column can be stored in mobile phase. At all times, prevent air from entering the column!
10.	Column Protection:		A guard column is available for the **TSKgel** SCX column. It is also important to protect the column with a frit filter, and to filter the mobile phase and samples using 0.45 micron membranes. Column life depends greatly on sample cleanliness. As a general rule, the column should be replaced when the peaks become excessively wide, or when the peaks show splitting.

B. SPECIFICATIONS

The performance of **TSKgel** SCX (H+) 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):	≥	12,000
Asymmetry Factor (AF):		0.8 - 1.6

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

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