TSK-GEL® SCX (H+) Products

Part Numbers: 07158, SCX (H^+), 7.8mm ID x 30cmm, 5μm

Functional Group: $-SO_3^-$

Small Ion Capacity: > 1.5 meq/mL

This sheet contains the recommended operating conditions and the specifications for TSK-GEL 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 TSK-GEL are described in a separate Instruction Manual.

A. OPERATING CONDITIONS

1.	Shipping Solvent:	Distilled deionized water
2.	Max. Flow Rate:	1.2 mL/min When a mobile phase 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 50% of the maximum flow rate.
3.	Standard Flow Rate:	0.5 - 1.0 mL/min
4.	Max. Pressure:	50 kg/cm^2 = 750 psi
5.	pH Range:	1 - 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) 5mM H_2S0_4, 5mM $HClO_4$, 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:	It is also important to protect the column with a frit filter, and to filter the mobile phase and samples using 0.45μm 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 TSK-GEL SCX (H^+) column is tested under the conditions described in the Data Sheet. All columns have passed the following quality control specifications:

1.	Number of Theoretical Plates (N):	$\geq$ 12,000
2.	Asymmetry Factor (AF):	0.8 - 1.6

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