TOSOH BIOSCIENCE

RESIN INFORMATION SHEET

Product Name	**TSKgel® SP-5PW** (Strong cation exchange chromatography resin)	
Part Numbers	0043382	**TSKgel** SP-5PW (20), 25 mL
	0014714	**TSKgel** SP-5PW (20), 250 mL
	0014715	**TSKgel** SP-5PW (20), 1 L
	0018435	**TSKgel** SP-5PW (20), 5 L
	0043282	**TSKgel** SP-5PW (30), 25 mL
	0014716	**TSKgel** SP-5PW (30), 250 mL
	0014717	**TSKgel** SP-5PW (30), 1 L
	0018384	**TSKgel** SP-5PW (30), 5 L

Product Description

TSKgel is a methacrylic polymer with very high mechanical and chemical stability.

TSKgel SP-5PW chromatographic resin is designed for ion exchange chromatography. This chromatographic mode separates molecules on the basis of ionic interactions between the sample and the resin. The separation is usually accomplished in buffered aqueous solution with a gradient of increasing ionic strength. Alternatively, pH adjustment may be used for control of elution.

Operating Conditions

Packing pressure	Typically 1 MPa
Shipping solvent	20 % (v/v) ethanol
Shipping formulation	72 % (v/v) slurry in shipping solvent (*)
Pressure limiting factor	Depend on column hardware (typically 2 MPa)
Operating linear flowrate	Typically 60 – 1200 cm/hour (depend on particle size)
Long term storage conditions	20 % (v/v) ethanol
Cleaning in place / sanitization	0.1 - 0.5 mol/L NaOH or 0.1 mol/L HCl

Specifications

Particle size distribution (Min. 70 % within range)	15 - 25 μm for (20)-grade 20 - 40 μm for (30)-grade
Ion exchange capacity	0.06 - 0.12 eq/L
Protein adsorption capacity (of lysozyme)	20 - 40 g/L
Bacterial count	Max. 100 CFU/mL
Endotoxin concentration	Max. 10.0 EU/mL
Eluable matter	Max. 0.2 % (for dry gel)
Foreign substance (colored particle)	Unobserved

Additional Information

Appearance	White resin slurry which settles upon standing
Mean pore diameter (base resin)	100 nm (*)

(*) The value is for reference only, not guaranteed.

Lot-specific data are included in the Certificate of Analysis (COA) shipped with the product.
For detailed test procedures please refer to the appropriate Regulatory Support File.