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PRODUCT SPECIFICATION SHEET

Product Name: Toyopearl® Q-600C AR (strong anion exchange resin with high capacity)

Part Numbers:

21985	Toyopearl Q-600C AR, 100 µm, 100 mL
21986	Toyopearl Q-600C AR, 100 µm, 250 mL
21987	Toyopearl Q-600C AR, 100 µm, 1 L
21988	Toyopearl Q-600C AR, 100 µm, 5 L
21992	ToyoScreen Q-600C AR, 1 mL x 6 ea.
21993	ToyoScreen Q-600C AR, 5 mL x 6 ea.
21400	ToyoScreen Column Holder
42194	ToyoScreen Column Holder with fittings

Product Description: Toyopearl chromatographic resins are comprised of a methacrylic polymer incorporating high mechanical and chemical stability. Resins are available as non-functionalized “HW” series resins for size exclusion separations and derivatized with surface chemistries for alternative modes of chromatography such as ion exchange, hydrophobic interaction or affinity separations.

Toyopearl Q-600C AR chromatographic resins are designed for anion 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. Toyopearl Q-600C AR resins were designed to withstand higher concentrations of NaOH used in normal cleaning operations.

Formulation: Particulate resin (spherical), available in particle sizes (mean diameter):
 100 µm = “C” grade
 Supplied as slurry in 20 % ethanol (v/v).

Physicochemical Specifications:

Appearance	White resin slurry which settles upon standing
Particle Size Distribution (>80 % within range)	50 – 150 µm for C-grade
Exclusion Limit	2.5 x10 ⁵ Dalton (globular protein)
Mean Pore Diameter	750 Å
Pressure drop across the column	max. 3 bar (recommended)
Operating Linear Flowrate	normally 10 – 600 cm/hour (depending on particle size)
Ion Exchange Capacity	0.15 - 0.20 meq/mL
Protein Adsorption Capacity	> 120 g/l (Bovine Serum Albumin)
Bacterial Count	≤ 100 CFU/mL
Endotoxin Concentration	≤ 10.0 endotoxin units/mL
Pack sizes and type	100 mL, 250 mL, 1 L, 5 L, 50 L Packed in virgin Polyethylene container with Polypropylene cap.

▪ Resin Volume per Container	The indicated volume is the settled resin volume.
▪ Shipping Solvent	72 % (v/v) slurry in 20 % (v/v) ethanol
▪ Long Term Storage Conditions	20 % (v/v) ethanol
▪ Cleaning in Place / Sanitization	0.1 mol/L HCl or 0.1 mol/L NaOH (can tolerate exposure up to 1.0 mol/L NaOH for several months)
▪ Foreign Substance	not observed, no visual evidence
▪ Eluable Matter	< 0.2 %
▪ Shelf Life Stability	Minimum 10 years

For detailed test procedures please refer to Regulatory Support File BB-MF-3907.