



RESIN INFORMATION SHEET

Product Name TOYOPEARL® SuperQ-650
(Strong anion exchange chromatography resin)

Part Numbers	19823	TOYOPEARL SuperQ-650S, 25 mL
	17223	TOYOPEARL SuperQ-650S, 250 mL
	17224	TOYOPEARL SuperQ-650S, 1 L
	17225	TOYOPEARL SuperQ-650S, 5 L
	19679	TOYOPEARL SuperQ-650S, 50 L
	43205	TOYOPEARL SuperQ-650M, 100 mL
	17227	TOYOPEARL SuperQ-650M, 250 mL
	17228	TOYOPEARL SuperQ-650M, 1 L
	17229	TOYOPEARL SuperQ-650M, 5 L
	21311	TOYOPEARL SuperQ-650M, 50 L
	43275	TOYOPEARL SuperQ-650C, 100 mL
	17231	TOYOPEARL SuperQ-650C, 250m L
	17232	TOYOPEARL SuperQ-650C, 1 L
	17233	TOYOPEARL SuperQ-650C, 5 L

Product Description TOYOPEARL chromatographic resins are based on a rigid methacrylic polymer, resulting in 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 SuperQ-650 chromatographic resin is 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.

Operating Conditions	Packing pressure	Typically 0.3 MPa
	Shipping solvent	20 % (v/v) ethanol
	Shipping formulation	72 % (v/v) slurry in shipping solvent (*)
	Pressure limiting factor	Depend on column hardware (typically 0.7 MPa)
	Operating linear flowrate	Typically 10 - 600 cm/hour
	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. 80 % within range)	20 - 50 µm for S-grade 40 - 90 µm for M-grade 50 - 150 µm for M-grade
	Ion exchange capacity	0.20 - 0.30 eq/L
	Protein adsorption capacity (of BSA)	105 - 155 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.