

**RESIN INFORMATION SHEET**

**Product Name** TOYOPEARL® GigaCap Q-650  
(Strong anion exchange chromatography resin)

<b>Part Numbers</b>	0022881	TOYOPEARL GigaCap Q-650S, 25 mL
	0022882	TOYOPEARL GigaCap Q-650S, 250 mL
	0022883	TOYOPEARL GigaCap Q-650S, 1 L
	0022884	TOYOPEARL GigaCap Q-650S, 5 L
	0022885	TOYOPEARL GigaCap Q-650S, 50 L
	0021854	TOYOPEARL GigaCap Q-650M, 100 mL
	0021855	TOYOPEARL GigaCap Q-650M, 250 mL
	0021856	TOYOPEARL GigaCap Q-650M, 1 L
	0021857	TOYOPEARL GigaCap Q-650M, 5 L
	0021858	TOYOPEARL GigaCap Q-650M, 50 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 GigaCap Q-650 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.

<b>Operating Conditions</b>	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

<b>Specifications</b>	Particle size distribution (min. 80 % within range)	20 - 50 µm for S-grade 50 - 100 µm for M-grade
	Ion exchange capacity	0.14 - 0.24 eq/L for S-grade 0.10 - 0.20 eq/L for M-grade
	Protein adsorption capacity (of BSA)	Min. 170 g/L for S-grade Min. 162 g/L for M-grade
	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)	Max. 6

<b>Additional Information</b>	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.