

**RESIN INFORMATION SHEET**

**Product Name** TOYOPEARL® GigaCap CM-650M  
(Weak cation exchange chromatography resin)

<b>Part Numbers</b>	21946	TOYOPEARL GigaCap CM-650M, 100 mL
	21947	TOYOPEARL GigaCap CM-650M, 250 mL
	21948	TOYOPEARL GigaCap CM-650M, 1 L
	21949	TOYOPEARL GigaCap CM-650M, 5 L
	21950	TOYOPEARL GigaCap CM-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 CM-650M chromatographic resin is designed for cation 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)	50 - 100 µm
	Ion exchange capacity	0.17 - 0.28 eq/L
	Protein adsorption capacity (of γ-globulin)	Min. 110 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)	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.