



RESIN INFORMATION SHEET

Product Name TOYOPEARL® AF-Chelate-650M
(Metal chelating resin for affinity chromatography)

Part Numbers	0014475	TOYOPEARL AF-Chelate-650M, 25 mL
	0019800	TOYOPEARL AF-Chelate-650M, 100 mL
	0014907	TOYOPEARL AF-Chelate-650M, 1 L
	0014908	TOYOPEARL AF-Chelate-650M, 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 AF-Chelate-650M is a metal chelating support for affinity chromatography. The product is prepared by introducing iminodiacetic acid onto TOYOPEARL HW-65. TOYOPEARL AF-Chelate-650M, after priming with metal ions, is used to isolate proteins containing histidine, cysteine and tryptophan residues. This resin is particularly useful for the purification of plasma proteins and other enzymes.

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)	40 - 90 µm
	Ion exchange capacity	25 - 45 meq/L
	Bacterial count	Max. 100 CFU/mL
	Endotoxin concentration	Max. 10.0 EU/mL
	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.