

**RESIN INFORMATION SHEET**

**Product Name** TOYOPEARL® AF-Carboxyl-650M  
(Reactive resin for affinity chromatography)

<b>Part Numbers</b>	43412	TOYOPEARL AF-Carboxyl-650M, 10 mL
	08006	TOYOPEARL AF-Carboxyl-650M, 25 mL
	08041	TOYOPEARL AF-Carboxyl-650M, 100 mL
	18827	TOYOPEARL AF-Carboxyl-650M, 1 L
	18828	TOYOPEARL AF-Carboxyl-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-Carboxyl-650M is a reactive support resin for affinity chromatography. The product provides a useful and mild approach for coupling to amino groups of proteins or low molecular weight ligands to TOYOPEARL HW-65 resin. The carbodiimide mediated coupling reaction produces an amide bond between ligand and support resin.

<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

<b>Specifications</b>	Particle size distribution (min. 80 % within range)	40 - 90 µm
	Ion exchange capacity	0.08 - 0.12 eq/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

<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.