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PRODUCT SPECIFICATION SHEET

Product Name: Toyopearl® AF-Carboxy-650M (reactive resin for affinity chromatography)

Part Numbers:

43412	Toyopearl AF-Carboxy-650M, 65 µm, 10 mL
08006	Toyopearl AF-Carboxy-650M, 65 µm, 25 mL
08041	Toyopearl AF-Carboxy-650M, 65 µm, 100 mL
18827	Toyopearl AF-Carboxy-650M, 65 µm, 1 L
18828	Toyopearl AF-Carboxy-650M, 65 µm, 5 L

Product Description: Toyopearl is a methacrylic polymer incorporating high mechanical and chemical stability. Resins are available as non-functionalised “HW” series resins for size exclusion separations, and derivatised with surface chemistries for alternative modes of chromatography such as ion exchange, hydrophobic interaction or affinity separations.

Toyopearl® AF-Carboxy-650M is a reactive support resin for affinity chromatography. Toyopearl AF-Carboxy-650M 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.

Formulation: Particulate resin (spherical), available in particle sizes (mean diameter):
 65 µm = “M” grade
 Supplied as slurry in 20 % ethanol (v/v).

Physicochemical Specifications:

Appearance	White resin slurry which settles upon standing
Particle Size Distribution (>80 % within range)	40 – 90 µm for Toyopearl AF-Carboxy-650M
Exclusion Limit	< 5 x10 ⁶ Dalton (globular protein)
Mean Pore Diameter	1000 Å
Pressure drop across the column	max. 7 bar (recommended)
Operating Linear Flowrate	normally 60 – 600 cm/hour
Ion Exchange Capacity	100 ± 20 µeq/mL
Protein Adsorption Capacity	40 ± 10 mg/mL (Lysozyme)
Bacterial Count	≤ 100 CFU/mL
Endotoxin Concentration	≤ 10.0 endotoxin units/mL
Pack sizes and type	10 mL, 25 mL, 100 mL Packed in virgin Polyethylene container with Polypropylene cap.
Resin Volume per Container	The indicated volume is the settled resin volume.
Shipping Solvent	72 % (v/v) slurry in 20 % (v/v) ethanol
Long Term Storage Conditions	20 % (v/v) ethanol
Cleaning in Place / Sanitization	0.5 M NaOH or 0.1 M HCl
Foreign Substance	not observed, no visual evidence
Eluable Matter	< 0.1 %