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PRODUCT SPECIFICATION SHEET

Product Name: Toyopearl® AF-Epoxy-650M (activated base resin for affinity chromatography)

Part Numbers:

43402	Toyopearl AF-Epoxy-650M, 65 µm, 5 g
08000	Toyopearl AF-Epoxy-650M, 65 µm, 10 g
08038	Toyopearl AF-Epoxy-650M, 65 µm, 100 g
18315	Toyopearl AF-Epoxy-650M, 65 µm, 1 kg

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-Epoxy-650M is an activated support resin for affinity chromatography. The product is prepared with high density epoxy functionalisation of Toyopearl HW-65. It is especially useful when high densities of low molecular weight species are to be coupled, such as glycine and glutathione. Proteins may also be immobilised.

Formulation: Particulate resin (spherical), available in particle sizes (mean diameter): 65 µm = "M" grade, when swollen in aqueous solution. Supplied as dry, free-flowing powder.

Physicochemical Specifications:

▪ Appearance	White powder
▪ Particle Size Distribution (>80 % within range)	40 – 90 µm for Toyopearl AF-Epoxy-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
▪ Ligand Density	0.6 – 1.0 mmol/g
▪ Bacterial Count	≤ 100 CFU/mL
▪ Endotoxin Concentration	≤ 10.0 endotoxin units/mL
▪ Pack sizes and type	5 g, 10 g, 100 g Packed in virgin Polyethylene container with Polypropylene cap.
▪ Resin Volume per Container	1g is equivalent to ~3.5 mL settled swollen resin volume
▪ Shipping Conditions	dry, free-flowing powder
▪ Long Term Storage Conditions	dry at 4° C
▪ Foreign Substance	not observed, no visual evidence
▪ Eluable Matter	< 0.1 %