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PRODUCT SPECIFICATION SHEET

Product Name: Toyopearl® AF-Red-650M (functionalised resin for affinity chromatography)

Part Numbers	08651	Toyopearl AF-Red-650M, 65 µm, 25 mL
	19801	Toyopearl AF-Red-650M, 65 µm, 100 mL
	42102	Toyopearl AF-Red-650M, 65 µm, 1 L
	21388	ToyoScreen AF-Red-650M, 1 mL x 6 ea.
	21389	ToyoScreen AF-Red-650M, 5 mL x 6 ea.
	21400	ToyoScreen Column Holder
	42194	ToyoScreen Column Holder with fittings

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-Red-650M is functionalised with Procion Red HE-3B, also known as Reactive Red 120, and is useful in the purification of nucleotide-dependent enzymes, lipoproteins, plasminogen, peptide hormones and cytotoxins.

Formulation: Particulate resin (spherical), available in particle sizes (mean diameter):
65 µm = “M” grade
Supplied as slurry in 20 % ethanol (v/v) / 1M NaCl.

Physicochemical Specifications:

▪ Appearance	Red resin slurry which settles upon standing
▪ Particle Size Distribution (>80 % within range)	40 – 90 µm for Toyopearl AF-Red-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	7 µmol/mL
▪ Protein Adsorption Capacity	3.5 ± 1.0 mg/mL (human serum albumin)
▪ Bacterial Count	≤ 100 CFU/mL
▪ Endotoxin Concentration	≤ 10.0 endotoxin units/mL
▪ Pack sizes and type	25 mL, 500 mL, 1 L 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 / 1M NaCl
▪ Long Term Storage Conditions	20 % (v/v) ethanol / 1M NaCl, at 4-8° C
▪ Foreign Substance	not observed, no visual evidence
▪ Eluable Matter	< 0.1 %