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## PRODUCT SPECIFICATION SHEET

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

**Part Numbers:**

- 19688 Toyopearl AF-Blue HC-650M, 65 µm, 25 mL
- 19689 Toyopearl AF-Blue HC-650M, 65 µm, 100 mL
- 19690 Toyopearl AF-Blue HC-650M, 65 µm, 1 L
- 19691 Toyopearl AF-Blue HC-650M, 65 µm, 5 L
- 21386 ToyoScreen AF-Blue HC-650M, 1 mL x 6 ea.
- 21387 ToyoScreen AF-Blue HC-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-BlueHC-650M** is functionalised with Cibacron Blue F3GA and can be used for the purification of nucleotide-dependent enzymes, lipoproteins, plasminogen, peptide hormones, blood components coagulation factors, albumin and cytotoxins.

This resin has improved caustic stability and reduced dye leakage, compared to the none-HC type.

**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	Blue resin slurry which settles upon standing
▪ Particle Size Distribution (>80 % within range)	40–90 µm
▪ Exclusion Limit	5 x10 <sup>6</sup> 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
▪ pH Stability	4-13
▪ Sterilisation	Autoclave at 121°C for 20 min in water
▪ Ligand Density	>16 µmol/mL
▪ Protein Adsorption Capacity	> 18 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/1 M NaCl, at 4-8° C
▪ Eluable Matter	< 0.1 %