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PRODUCT SPECIFICATION SHEET

Product Name: Toyopearl® SuperButyl-550C (hydrophobic interaction resin – strongly hydrophobic)



Part Numbers:	19955 Toyopearl SuperButyl-550C, 65 µm, 25 mL
	19956 Toyopearl SuperButyl-550C, 65 µm, 100 mL
	19957 Toyopearl SuperButyl-550C, 65 µm, 1 L
	19958 Toyopearl SuperButyl-550C, 65 µm, 5 L
	21382 ToyoScreen SuperButyl-550C, 1 mL x 6 ea.
	21383 ToyoScreen SuperButyl-550C, 5 mL x 6 ea.
	21398 ToyoScreen HIC Mix Pack, 1 mL x 6 grades x 1 ea. (Ether, Butyl-650, Hexyl, Phenyl, PPG, SuperButyl)
	21399 ToyoScreen HIC Mix Pack, 5 mL x 6 grades x 1 ea. (Ether, Butyl-650, Hexyl, Phenyl, PPG, SuperButyl)
	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 SuperButyl-550C chromatographic resin is designed for hydrophobic interaction chromatography. This chromatographic mode separates molecules on the basis of hydrophobic interactions between the sample and the resin. The separation is usually accomplished in buffered aqueous solution with a gradient of decreasing ionic strength. Toyopearl Superbutyl-550C resin, incorporates a higher binding capacity for low molecular weight proteins (MW < 30 KDa).

Formulation: Particulate resin (spherical), available in particle sizes (mean diameter):
 100 µm = "C" 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)	50 – 150 µm for SuperButyl-550 C
▪ Exclusion Limit	7 x 10 ⁵ Dalton (Pullulan)
▪ Mean Pore Diameter	500 Å
▪ Pressure drop across the column	max. 7 bar (recommended)
▪ Operating Linear Flowrate	normally 10 – 600 cm/hour (depending on particle size)
▪ Protein Adsorption Capacity	52 ± 7 mg/mL (Lysozyme)
▪ Bacterial Count	≤ 100 CFU/mL
▪ Endotoxin Concentration	≤ 10.0 endotoxin units/mL
▪ Pack sizes and type	25 mL, 100 mL, 250 mL, 1 L, 5 L, 50 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
▪ 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 %
▪ Shelf Life Stability	Minimum 5 years

For detailed test procedures please refer to Regulatory Support File BB-MF-3907.