

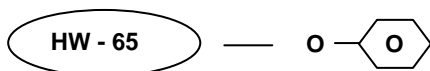


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## PRODUCT SPECIFICATION SHEET

**Product Name:** Toyopearl® Phenyl-650 (hydrophobic interaction resin – moderately hydrophobic)



<b>Part Numbers:</b>	43152	Toyopearl Phenyl-650S, 35 µm, 25 mL
	14477	Toyopearl Phenyl-650S, 35 µm, 100 mL
	14784	Toyopearl Phenyl-650S, 35 µm, 1 L
	14935	Toyopearl Phenyl-650S, 35 µm, 5 L
	19818	Toyopearl Phenyl-650M, 65 µm, 25 mL
	14478	Toyopearl Phenyl-650M, 65 µm, 100 mL
	14783	Toyopearl Phenyl-650M, 65 µm, 1 L
	14943	Toyopearl Phenyl-650M, 65 µm, 5 L
	18364	Toyopearl Phenyl-650M, 65 µm, 50 L
	43126	Toyopearl Phenyl-650C, 100 µm, 25 mL
	14479	Toyopearl Phenyl-650C, 100 µm, 100 mL
	14785	Toyopearl Phenyl-650C, 100 µm, 1 L
	14944	Toyopearl Phenyl-650C, 100 µm, 5 L
	21374	ToyoScreen Phenyl-650M, 1 mL x 6 ea.
	21375	ToyoScreen Phenyl-650M, 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 Phenyl-650 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.

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

<b>Physicochemical Specifications:</b>	▪ Appearance	White resin slurry which settles upon standing
	▪ Particle Size Distribution (>80 % within range)	20 – 50 µm for Phenyl-650S 40 – 90 µm for Phenyl-650M 50 – 150 µm for Phenyl-650 C
	▪ Exclusion Limit	5 x 10 <sup>6</sup> Dalton (globular protein)

▪ Mean Pore Diameter	1000 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	40 ± 10 mg/mL (Lysozyme)
▪ Bacterial Count	≤ 100 CFU/mL
▪ Endotoxin Concentration	≤ 10.0 endotoxin units/mL
▪ Pack sizes and type	25 mL, 50 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.**