



RESIN INFORMATION SHEET

Product Name	TOYOPEARL [®] Phenyl-650 (Hydrophobic interaction chromatography resin)		
Part Numbers	0043152	TOYOPEARL Phenyl-650S, 2	25 mL
	0014477	TOYOPEARL Phenyl-650S,	100 mL
	0014784	TOYOPEARL Phenyl-650S,	I L
	0014935	TOYOPEARL Phenyl-650S,	5 L
	0019818	TOYOPEARL Phenyl-650M,	25 mL
	0014478	TOYOPEARL Phenyl-650M,	100 mL
	0014783	TOYOPEARL Phenyl-650M,	1 L
	0014943	TOYOPEARL Phenyl-650M,	5 L
	0018364	TOYOPEARL Phenyl-650M,	50 L
	0043126	TOYOPEARL Phenyl-650C,	25 mL
	0014479	TOYOPEARL Phenyl-650C,	100 mL
	0014785	TOYOPEARL Phenyl-650C,	1 L
	0014944	······································	
Product Description	 TOYOPEARL chromatographic resins are based on a rigid methacrylic polymer, resulting in high mechanical and chemical stability. Resins are available as non-functionalized "HW" series resins for size exclusion separations, and derivatized with surface chemistries for alternative modes of chromatography such as ion exchange, hydrophobic interaction or affinity separations. TOYOPEARL Phenyl-650 chromatographic resins are designed for hydrophobic interaction chromatography. This chromatographic mode separates molecules on the basis of hydrophobic interactions between the sample and the ligand. The separation is usually accomplished in buffered aqueous solution with a gradient of decreasing ionic strength. 		
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Operating	5 1		Typically 0.3 MPa
	strength.	e	
Operating Conditions	strength. Packing pressur	re t	Typically 0.3 MPa
	strength. Packing pressur Shipping solven	re t lation	Typically 0.3 MPa 20 % (v/v) ethanol
Operating Conditions	strength. Packing pressur Shipping solven Shipping formul	re t lation g factor	Typically 0.3 MPa 20 % (v/v) ethanol 72 % (v/v) slurry in shipping solvent (*)
	strength. Packing pressur Shipping solven Shipping formul Pressure limitin Operating linea	e t lation g factor r flowrate	Typically 0.3 MPa 20 % (v/v) ethanol 72 % (v/v) slurry in shipping solvent (*) Depend on column hardware (typically 0.7 MPa) Typically 10 - 600 cm/hour
	strength. Packing pressur Shipping solven Shipping formul Pressure limitin Operating linea Long-term stora	re t lation ng factor r flowrate age conditions	Typically 0.3 MPa 20 % (v/v) ethanol 72 % (v/v) slurry in shipping solvent (*) Depend on column hardware (typically 0.7 MPa) Typically 10 - 600 cm/hour 20 % (v/v) ethanol
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Conditions	strength. Packing pressur Shipping solven Shipping formul Pressure limitin Operating linea Long-term stora Cleaning-in-plac Particle size dis (min. 80 %	re t lation ng factor r flowrate age conditions ce/Sanitization	Typically 0.3 MPa 20 % (v/v) ethanol 72 % (v/v) slurry in shipping solvent (*) Depend on column hardware (typically 0.7 MPa) Typically 10 - 600 cm/hour 20 % (v/v) ethanol 0.1 - 0.5 mol/L NaOH or 0.1 mol/L HCl 20 - 50 µm for S-grade 40 - 90 µm for M-grade
Conditions	strength. Packing pressur Shipping solven Shipping formul Pressure limitin Operating linea Long-term stora Cleaning-in-plac Particle size dis (min. 80 %	re t t t t t t t t t t t t t t t t t t t	Typically 0.3 MPa 20 % (v/v) ethanol 72 % (v/v) slurry in shipping solvent (*) Depend on column hardware (typically 0.7 MPa) Typically 10 - 600 cm/hour 20 % (v/v) ethanol 0.1 - 0.5 mol/L NaOH or 0.1 mol/L HCl 20 - 50 µm for S-grade 40 - 90 µm for M-grade 50 - 150 µm for C-grade
Conditions	strength. Packing pressur Shipping solven Shipping formul Pressure limitin Operating linea Long-term stora Cleaning-in-plae Particle size dis (min. 80 %) Protein adsorpt	re t t lation ng factor r flowrate age conditions ce/Sanitization stribution within range) tion capacity (of lysozyme)	Typically 0.3 MPa 20 % (v/v) ethanol 72 % (v/v) slurry in shipping solvent (*) Depend on column hardware (typically 0.7 MPa) Typically 10 - 600 cm/hour 20 % (v/v) ethanol 0.1 - 0.5 mol/L NaOH or 0.1 mol/L HCl 20 - 50 µm for S-grade 40 - 90 µm for M-grade 50 - 150 µm for C-grade 30 - 50 g/L
Conditions	strength. Packing pressur Shipping solven Shipping formul Pressure limitin Operating linea Long-term stora Cleaning-in-plac Particle size dis (min. 80 %) Protein adsorpt Bacterial count	re t t lation ng factor r flowrate age conditions ce/Sanitization stribution within range) tion capacity (of lysozyme)	Typically 0.3 MPa 20 % (v/v) ethanol 72 % (v/v) slurry in shipping solvent (*) Depend on column hardware (typically 0.7 MPa) Typically 10 - 600 cm/hour 20 % (v/v) ethanol 0.1 - 0.5 mol/L NaOH or 0.1 mol/L HCl 20 - 50 µm for S-grade 40 - 90 µm for M-grade 50 - 150 µm for C-grade 30 - 50 g/L Max. 100 CFU/mL Max. 10.0 EU/mL
Conditions	strength. Packing pressur Shipping solven Shipping formul Pressure limitin Operating linea Long-term stora Cleaning-in-plac Particle size dis (min. 80 % Protein adsorpt Bacterial count Endotoxin conc Eluable matter	re t t lation ng factor r flowrate age conditions ce/Sanitization stribution within range) tion capacity (of lysozyme)	Typically 0.3 MPa 20 % (v/v) ethanol 72 % (v/v) slurry in shipping solvent (*) Depend on column hardware (typically 0.7 MPa) Typically 10 - 600 cm/hour 20 % (v/v) ethanol 0.1 - 0.5 mol/L NaOH or 0.1 mol/L HCl 20 - 50 µm for S-grade 40 - 90 µm for M-grade 50 - 150 µm for C-grade 30 - 50 g/L Max. 100 CFU/mL
Conditions	strength. Packing pressur Shipping solven Shipping formul Pressure limitin Operating linea Long-term stora Cleaning-in-plac Particle size dis (min. 80 % Protein adsorpt Bacterial count Endotoxin conc Eluable matter Foreign substan	re t lation ng factor r flowrate age conditions ce/Sanitization stribution within range) cion capacity (of lysozyme) entration	Typically 0.3 MPa 20 % (v/v) ethanol 72 % (v/v) slurry in shipping solvent (*) Depend on column hardware (typically 0.7 MPa) Typically 10 - 600 cm/hour 20 % (v/v) ethanol 0.1 - 0.5 mol/L NaOH or 0.1 mol/L HCl 20 - 50 µm for S-grade 40 - 90 µm for M-grade 50 - 150 µm for C-grade 30 - 50 g/L Max. 100 CFU/mL Max. 0.2 % (for dry gel) Unobserved
Conditions	strength. Packing pressur Shipping solven Shipping formul Pressure limitin Operating linea Long-term stora Cleaning-in-pla Particle size dis (min. 80 % Protein adsorpt Bacterial count Endotoxin conce Eluable matter Foreign substan Appearance	re t lation ng factor r flowrate age conditions ce/Sanitization stribution within range) cion capacity (of lysozyme) entration	Typically 0.3 MPa20 % (v/v) ethanol72 % (v/v) slurry in shipping solvent (*)Depend on column hardware (typically 0.7 MPa)Typically 10 - 600 cm/hour20 % (v/v) ethanol0.1 - 0.5 mol/L NaOH or 0.1 mol/L HCl20 - 50 µm for S-grade40 - 90 µm for M-grade50 - 150 µm for C-grade30 - 50 g/LMax. 100 CFU/mLMax. 0.2 % (for dry gel)

Lot-specific data are included in the Certificate of Analysis (COA) shipped with the product. For detailed test procedures please refer to the appropriate Regulatory Support File.