



RESIN INFORMATION SHEET

Product Name	TOYOPEARL® DEAE-650 (Weak anion exchange chromatography resin)	
Part Numbers	0019804	TOYOPEARL DEAE-650S, 25 mL
	0007472	TOYOPEARL DEAE-650S, 250 mL
	0014692	TOYOPEARL DEAE-650S, 1 L
	0007973	TOYOPEARL DEAE-650S, 5 L
	0021483	TOYOPEARL DEAE-650S, 50 L
	0043201	TOYOPEARL DEAE-650M, 100 mL
	0007473	TOYOPEARL DEAE-650M, 250 mL
	0014693	TOYOPEARL DEAE-650M, 1 L
	0007974	TOYOPEARL DEAE-650M, 5 L
	0018367	TOYOPEARL DEAE-650M, 50 L
	0007988	TOYOPEARL DEAE-650C, 250 mL
	0014694	TOYOPEARL DEAE-650C, 1 L
	0007989	TOYOPEARL DEAE-650C, 5 L
	0022853	TOYOPEARL DEAE-650C, 50 L

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 DEAE-650 chromatographic resin is designed for anion exchange chromatography. This chromatographic mode separates molecules on the basis of ionic interactions between the sample and the resin. The separation is usually accomplished in buffered aqueous solution with a gradient of increasing ionic strength. Alternatively, pH adjustment may be used for control of elution.

Operating Conditions	Packing pressure	Typically 0.3 MPa
	Shipping solvent	20 % (v/v) ethanol
	Shipping formulation	72 % (v/v) slurry in shipping solvent (*)
	Pressure limiting factor	Depend on column hardware (typically 0.7 MPa)
	Operating linear flowrate	Typically 10 - 600 cm/hour (depend on particle size)
	Long term storage conditions	20 % (v/v) ethanol
	Cleaning in place / sanitization	0.1 - 0.5 mol/L NaOH or 0.1 mol/L HCl

Specifications	Particle size distribution (Min. 80 % within range)	20 - 50 µm for S-grade 40 - 90 µm for M-grade 50 - 150 µm for C-grade
	Ion exchange capacity	0.08 - 0.12 eq/L for S- and M-grade 0.05 - 0.11 eq/L for C-grade
	Protein adsorption capacity (of BSA)	25 - 35 g/L
	Bacterial count	Max. 100 CFU/mL
	Endotoxin concentration	Max. 10.0 EU/mL
	Eluable matter	Max. 0.2 % (for dry gel)
	Foreign substance (colored particle)	Unobserved

Additional Information	Appearance	White resin slurry which settles upon standing
	Mean pore diameter (base resin)	100 nm (*)

(*) The value is for reference only, not guaranteed.

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.