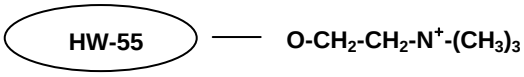
Toyopearl® QAE-550 Resins

(strong anion exchange chromatography resins)



Part Numbers:

43271	**Toyopearl QAE-550C, 100µm, 100mL**
14026	**Toyopearl QAE-550C, 100µm, 250mL**
14704	**Toyopearl QAE-550C, 100µm, 1L**
14027	**Toyopearl QAE-550C, 100µm, 5L**
18365	**Toyopearl QAE-550C, 100µm, 50L**
21364	**ToyoScreen QAE-650C, 1mL x 6 ea.**
21365	**ToyoScreen QAE-650C, 5mL x 6 ea.**
21392	**ToyoScreen IEC Anion Mix Pack, 1mL x 3 grades x 2 ea. (DEAE, SuperQ, QAE)**
21393	**ToyoScreen IEC Anion Mix Pack, 5mL x 3 grades x 2 ea. (DEAE, SuperQ, QAE)**
21396	**ToyoScreen IEC Mix Pack, 1mL x 6 grades x 1 ea. (DEAE, SuperQ, QAE, CM, SP650, SP-550)**
21397	**ToyoScreen IEC Mix Pack, 5mL x 6 grades x 1 ea. (DEAE, SuperQ, QAE, CM, SP650, SP-550)**
21400	**ToyoScreen Column Holder**
42194	**ToyoScreen Column Holder with fittings**

Product Description

Toyopearl chromatographic resins are comprised of a methacrylic polymer incorporating 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 QAE-550 chromatographic resins are 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.

Formulation

72% (v/v) slurry in 20% (v/v) ethanol

This sheet contains the suggested operating conditions and specification ranges for Toyopearl QAE-550 resins. Lot-specific specifications are included in the Certificate of Analysis (C of A) shipped with the product.

A. OPERATING CONDITIONS

Pressure Drop Across the Column	max. 0.3 MPa (recommended)
Operating Linear Flow Rate	normally 10 – 600 cm/hour
Cleaning in Place/Sanitization	0.1mol/L NaOH or 0.1mol/L HCl
Long Term Storage Conditions	20% (v/v) ethanol (shipping solvent)

B. SPECIFICATIONS

Appearance	White resin slurry which settles upon standing
Particle Size Distribution (>80% within range)	50 – 150µm for C-grade
Mean Pore Diameter	50 nm
Exclusion Limit (base resin)	7×10^5 Dalton (globular protein)
Ion Exchange Capacity	0.33 ± 0.05 eq/L
Protein Adsorption Capacity	70 ± 10 g/L (Bovine Serum Albumin)
Bacterial Count	$\leq$ 100 CFU/mL
Endotoxin Concentration	$\leq$ 10.0 endotoxin units/mL
Resin Volume per Container	The indicated volume is the settled resin volume.
Foreign Substance	not observed, no visual evidence
Eluable Matter	$\leq$ 0.2%
Shelf Life Stability	Minimum 10 years