

Toyopearl® QAE-550 Resins

(strong anion exchange chromatography resins)



$$\text{O-CH}_2\text{-CH}_2\text{-N}^+(\text{CH}_3)_3$$

Part Numbers:	43271 Toyopearl QAE-550C, 100µm, 100mL	21364 ToyoScreen QAE-650C, 1mL x 6 ea.
	14026 Toyopearl QAE-550C, 100µm, 250mL	21365 ToyoScreen QAE-650C, 5mL x 6 ea.
	14704 Toyopearl QAE-550C, 100µm, 1L	21392 ToyoScreen IEC Anion Mix Pack, 1mL x 3 grades x 2 ea. (DEAE, SuperQ, QAE)
	14027 Toyopearl QAE-550C, 100µm, 5L	21393 ToyoScreen IEC Anion Mix Pack, 5mL x 3 grades x 2 ea. (DEAE, SuperQ, QAE)
	18365 Toyopearl QAE-550C, 100µm, 50L	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. 3 bar (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	500Å
Exclusion Limit (base resin)	7 x 10 ⁵ Dalton (globular protein)
Ion Exchange Capacity	0.33 ± 0.05 meq/mL
Protein Adsorption Capacity	70 ± 10 mg/mL (Bovine Serum Albumin)
Bacterial Count	≤ 100 CFU/mL
Endotoxin Concentration	≤ 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	≤ 0.2%
Shelf Life Stability	Minimum 10 years

RDS1060_MAY2009

Denmark

MD Scientific is authorized distributor in
Denmark for Tosoh Bioscience
www.md-scientific.dk - info@md-scientific.dk - Tel. 7027 8565

www.tosohbioscience.com

Tosoh Bioscience GmbH

Zettachring 6
D-70567 Stuttgart
Germany
Phone: 0711/13257 0