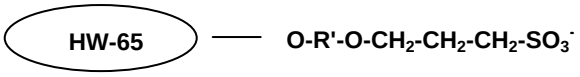
Toyopearl® SP-650 Resins

(strong cation exchange chromatography resins)



Part Numbers:

19822	**Toyopearl SP-650S, 65µm, 25mL**
08437	**Toyopearl SP-650S, 65µm, 250mL**
14698	**Toyopearl SP-650S, 65µm, 1L**
08438	**Toyopearl SP-650S, 65µm, 5L**
21477	**Toyopearl SP-650S, 65µm, 50L**
43202	**Toyopearl SP-650M, 65µm, 100mL**
07997	**Toyopearl SP-650M, 65µm, 250mL**
14699	**Toyopearl SP-650M, 65µm, 1L**
07998	**Toyopearl SP-650M, 65µm, 5L**
18369	**Toyopearl SP-650M, 65µm, 50L**
07994	**Toyopearl SP-650C, 100µm, 250mL**
14700	**Toyopearl SP-650C, 100µm, 1L**
07995	**Toyopearl SP-650C, 100µm, 5L**
21368	**ToyoScreen SP-650M, 1mL x 6 ea.**
21369	**ToyoScreen SP-650M, 5mL x 6 ea.**
21394	**ToyoScreen IEC Cation Mix Pack, 1mL x 3 grades x 2 ea. (CM, SP-650, SP-550)**
21395	**ToyoScreen IEC Cation Mix Pack, 5mL x 3 grades x 2 ea. (CM, SP-650, SP-550)**
21396	**ToyoScreen IEC Mix Pack, 1mL x 6 grades x 1 ea. (DEAE, SuperQ, QAE, CM, SP-650, SP-550)**
21397	**ToyoScreen IEC Mix Pack, 5mL x 6 grades x 1 ea. (DEAE, SuperQ, QAE, CM, SP-650, 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 SP-650 chromatographic resins are designed for cation 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 SP-650 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 (depending on particle size)
Cleaning in Place/Sanitization	0.5mol/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)	20 – 50µm for S-grade 40 – 90µm for M-grade 50 – 150µm for C-grade
Mean Pore Diameter	100 nm
Exclusion Limit	5×10^6 Dalton (globular protein)
Ion Exchange Capacity	0.15 ± 0.02 eq/L for S- and M-grade 0.15 ± 0.03 eq/L for C-grade
Protein Adsorption Capacity	50 ± 10 g/L (Lysozyme) for S- and M-grade 45 ± 10 g/L (Lysozyme) for C-grade
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