

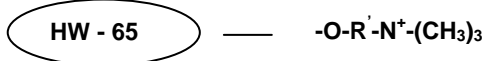


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## PRODUCT SPECIFICATION SHEET

**Product Name:** Toyopearl GigaCap® Q-650M (strong anion exchange resin)



- Part Numbers:**
- 21854 Toyopearl GigaCap Q-650M, 75 µm, 100 mL
  - 21855 Toyopearl GigaCap Q-650M, 75 µm, 250 mL
  - 21856 Toyopearl GigaCap Q-650M, 75 µm, 1 L
  - 21857 Toyopearl GigaCap Q-650M, 75 µm, 5 L
  - 21859 ToyoScreen GigaCap Q-650M, 1 mL x 6 ea.
  - 21860 ToyoScreen GigaCap Q-650M, 5 mL x 6 ea.
  - 21400 ToyoScreen Column Holder
  - 42194 ToyoScreen Column Holder with fittings

**Product Description:** Toyopearl is a methacrylic polymer incorporating high mechanical and chemical stability. Resins are available as non-functionalised “HW” series resins for size exclusion separations, and derivatised with surface chemistries for alternative modes of chromatography such as ion exchange, hydrophobic interaction or affinity separations.

**Toyopearl GigaCap® Q-650M** 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.

**Formulation:** Particulate resin (spherical), available in particle size (mean diameter):  
 75 µm = “M” grade  
 Supplied as slurry in 20 % ethanol (v/v).

**Physicochemical Specifications:**

|   |   |
|---|---|
| ▪ Appearance                                      | White resin slurry which settles upon standing  |
| ▪ Particle Size Distribution (>80 % within range) | 50 – 100 µm   |
| ▪ Exclusion Limit                                 | $6 \times 10^5$ (Polyethylene Oxide)  |
| ▪ Mean Pore Diameter                              | 500 Å   |
| ▪ Pressure drop across the column                 | max. 3 bar (recommended)  |
| ▪ Operating Linear Flowrate                       | normally 10 – 600 cm/hour   |
| ▪ Ion Exchange Capacity                           | $0.15 \pm 0.05$ meq/mL  |
| ▪ Protein Adsorption Capacity                     | > 162 mg/mL BSA   |
| ▪ Bacterial Count                                 | ≤ 100 CFU/mL  |
| ▪ Endotoxin Concentration                         | ≤ 10.0 endotoxin units/mL   |
| ▪ Pack sizes and type                             | 100 mL, 250 mL, 1 L, 5 L, 50 L<br>Packed in virgin Polyethylene container with Polypropylene cap. |

|                                    |   |
|------------------------------------|---|
| ▪ Resin Volume per Container       | The indicated volume is the settled resin volume. |
| ▪ Shipping Solvent                 | 72 % (v/v) slurry in 20 % (v/v) ethanol           |
| ▪ Long Term Storage Conditions     | 20 % (v/v) ethanol                                |
| ▪ Cleaning in Place / Sanitization | 0.5 M NaOH or 0.1 M HCl                           |
| ▪ Foreign Substance                | not observed, no visual evidence                  |
| ▪ Eluable Matter                   | < 0.2 %   |