

QuantumPure™ UC-10

Product Data Sheet

Premium SAC IX Resin with Uniform Particle Size

LG QuantumPure™ offers a comprehensive selection of high-performance ion exchange (IX) resins, designed to address a wide range of water treatment needs from deionization and softening to selective ion removal. Manufactured with state-of-the-art processes, LG QuantumPure™ IX resins provide consistent quality, excellent chemical resistance, and extended service life, reducing the frequency of replacements and maintenance.



Key Features

- Uniform particle size (uniformity coefficient is below 1.1)
- High reactivity and strong ion adsorption
- Operable in all pH ranges
- Excellent physical durability



Key Benefits

- Highly efficient exchange capacity
- Longer service cycle
- Broader range of operation
- Minimum pressure drop



Key Applications

- Selective metal ion removal
- Demineralization by cation removal
- Condensate polishing
- Mixed bed system with SBA

Physical and Chemical Properties

Product Name	QuantumPure™ UC-10
Matrix	Styrene-divinylbenzene, Gel
Functional Group	Sulfonic Acid
Ionic Form	Na ⁺
Shipping Weight (g/l)*	830
Specific Gravity*	1.32
Average Diameter (μm)	650±50
Total Capacity, min. (eq/l)	2.20
Moisture Retention (%)	38–44
Uniformity Coefficient	≤1.1
Swelling Rate (Na ⁺ →H ⁺ , %)*	8

Regeneration Specifications

Regenerant	HCl H ₂ SO ₄ NaCl
Concentration (%)	HCl (4–10) H ₂ SO ₄ (1–4) NaCl (8–12)
Level (g/l)	50–200
Flow Rate (m/h)	2–10
Rinse Requirement (BV)	2–6

Recommended Operating Conditions

Max. Operating Temp. (°C) [°F]	120 [248]
Min. Bed Depth (mm)	800
pH Range	0–14
Service Flow Rate (m/h)	5–120

Feed Water Limitations

Free Chlorine	Not Traceable
Turbidity	Less than 2 NTU
Iron and Heavy Metals	Less than 0.1 ppm

*The values specified are for reference only and does not guarantee performance.

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