

# QuantumPure™ UC-10

## Premium SAC IX Resin with Uniform Particle Size

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, 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 excellent 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

### Material Specifications

Product Name	QuantumPure™ UC-10
Matrix	Styrene-divinylbenzene, Gel
Functional Group	Sulfonic Acid
Ionic Form	Na <sup>+</sup>
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 <sup>+</sup> →H <sup>+</sup> , %)*	8

### Regeneration Specifications

Regenerant	HCl H <sub>2</sub> SO <sub>4</sub> NaCl
Concentration (%)	HCl (4–10) H <sub>2</sub> SO <sub>4</sub> (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.

The product performance is expressly conditioned on Buyer's storing, installing, operating, and maintaining Product in accordance with industry accepted good practices and Seller's written instructions provided in the Seller's Technical Manual may be viewed and downloaded at [www.nanoh2owater.com](http://www.nanoh2owater.com) information and data contained herein are deemed to be accurate and reliable and are offered in good faith, but without guarantee of performance. NanoH2O assumes no liability for results obtained or damages incurred

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