

QuantumPure™ UPW-400

Mixed Bed IX Resin for Ultrapure Water

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)
- Ready to use, pre-regenerated uniform cation & anion resin in equivalent exchange capacity
- Excellent physical properties



Key Benefits

- Highly efficient exchange capacity
- Longer service cycle
- Removal of both cations and anions
- Ready-to-use



Key Applications

- Demineralization
- TOC removal
- RO permeate water polishing
- UPW system

Physical and Chemical Properties

Material Specifications

Product Name		QuantumPure™ UPW-400	
Matrix		Styrene-divinylbenzene, Gel	
Functional Group		Sulfonic Acid	Type 1 (Trimethylammonium)
Ionic Form		H ⁺	OH ⁻
Total Capacity, min. (eq/ℓ)		1.9	1.0
Average Diameter (μm)		620±50	620±50
Uniformity Coefficient		≤1.1	≤1.1
Ionic Conversion (%)	H ⁺	99.0 Min	-
	OH ⁻	-	95.0 Min
	Cl ⁻	-	1.0 Max
Mixed Ratio		1:1 (by equivalents) Cation : Anion	
Inlet Condition	Specific Flow Rate	SV30	
	Resistivity	>17.5 MΩ·cm	
	TOC	<2 ppb	
Outlet Condition	Resistivity	Guaranteed ≥18.2 MΩ·cm (in 30 min.)	
	ΔTOC	<1 ppb (in 180 min.)	

Recommended Operating Conditions

Max. Operating Temp. (°C) [°F]	60 [140]
Min. Bed Depth (mm)	600
pH Range	0–14
Service Flow Rate (m/h)	5–60

* 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 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

through the application of the information contained herein. Customer is responsible for determining whether the products and information presented herein are appropriate for the customer's use and for ensuring that customer's workplace and disposal practices are in compliance with applicable laws and other governmental enactments. Specifications subject to change without notice. QuantumPure is the Trademark of NanoH₂O. All rights reserved. © NanoH₂O Co., Ltd.