QuantumPure™

Product Data Sheet

SAC IX Resins with Gaussian Distribution

LG QuantumPure™ offers a comprehensive range of high-performance Ion Exchange (IX) resins, designed to meet a wide range of water treatment needs from deionization and softening to selective ion removal. Produced using state-of-the-art manufacturing processes, LG QuantumPure™ IX resins deliver consistent quality, excellent chemical resistance, and extended service life, reducing the need for frequent replacements and maintenance.

Key Features

- High reactivity and strong ion adsorption
- Operable in all pH ranges
- Stable operation

Key Benefits

- Cost-effective water treatment
- Broader range of operation
- Reliable performance

Key Applications

- Softening
- Demineralization by cation removal
- Condensate polishing
- Mixed bed system with SBA

Physical and Chemical Properties

Product Name	QuantumPure™ GC-07	QuantumPure™ GC-08	QuantumPure™ GC-70	QuantumPure™ GC-80
Matrix	Styrene-divinylbenzene, Gel			
Functional Group	Sulfonic Acid			
Ionic Form	Na^+	Na^+	Na^+	Na^+
Shipping Weight (g/ℓ)*	800	800	800	800
Specific Gravity*	1.25	1.25	1.25	1.25
Average Diameter (μm)	300–1,200	300–1,200	300–1,200	300–1,200
Total Capacity, min. (eq/ℓ)	1.90	2.00	1.90	2.00
Moisture Retention (%)	45–50	43–50	45–50	43–50
Uniformity Coefficient	≤1.6	≤1.6	≤1.6	≤1.6
Swelling Rate ($Na^+ \rightarrow H^+$, %)*	9	8	8–9	8–9
Regeneration Specifications				
Regenerant	HCl H_2SO_4 NaCl	HCl H_2SO_4 NaCl	NaCl	NaCl
Concentration (%)	HCl (4–10) H_2SO_4 (1–4) NaCl (8–12)	HCl (4–10) H_2SO_4 (1–4) NaCl (8–12)	8–12	8–12
Level (g/ℓ)	50–200	50–200	50–200	50–200
Flow Rate (m/h)	4–20	4–20	4–20	4–20
Rinse Requirement (BV)	4–10	4–10	4–10	4–10
Recommended Operating Conditions				
Operating Temp (°C) [°F]	120 [248]	120 [248]	120 [248]	120 [248]
Min. Bed Depth (mm)	800	800	800	800
pH Range	0–14	0–14	0–14	0–14
Service Flow Rate (m/h)	5–50	5–50	5–50	5–50
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, operat ing, 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.lgwatersolutions.com information and data contained herein are Deemed to be accurate and reliable and are offered in good faith, but without guarantee of performance. LG Chem 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 LG Chem. All rights reserved. © LG Chem, Ltd.