IX Resins with Gaussian Distribution

Reliable Quality:

Uniformity coefficient below 1.6 ensures consistent performance across various applications.

Cost-Effective Solution:

Maintains high performance while reducing costs across diverse water treatment needs.

Flexible Applications:

Available in SAC, SBA, and WBA resin types for versatile applications across a broad range of water treatment needs.

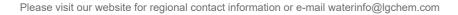
Product Name	QuantumPure™ GC-07	QuantumPure™ GC-08					
Resin Type	SAC						
Matrix	Styrene-divinylbenzene, Gel						
Functional Group		Sulfon	ic Acid				
Ionic Form	Na⁺	Na⁺	Na ⁺	Na ⁺			
Total Capacity, min. (eq/ℓ)	1.90	2.00	1.90	2.00			
Uniformity Coefficient	≤1.6						
Average Diameter (µm)	300–1200						
Specific Gravity*	1.25	1.25 1.25		1.25			
Shipping Weight (g/l)*	800	800	800				
Max. Operating Temperature	120°C / 248°F						
Operating pH Range	0-14						
Moisture Retention (%)	45–50	43–50	43–50				
Swelling Rate*	9% (Na ⁺ \rightarrow H ⁺)	8% (Na ⁺ \rightarrow H ⁺)	8-9% (Na ⁺ \rightarrow H ⁺)	8-9% (Na ⁺ \rightarrow H ⁺)			

Product Name	QuantumPure™ GA-10	QuantumPure™ GA-20	QuantumPure™ GWC-10L	QuantumPure™ GWA-30		
Resin Type	SE	ЗА	WAC	WBA		
Matrix	Styrene-diviny	lbenzene, Gel	Acrylic Acid- divinylbenzene, Porous	Styrene- divinylbenzene, Porous		
Functional Group	Trimethyl Ammonium (Type 1)	Dimethylethanol Ammonium (Type 2)	Carboxylic Tertian Acid Amin			
Ionic Form	Cl	Cl	H⁺	Free Base		
Total Capacity, min. (eq/l)	1.35	1.30	4.50	1.50		
Uniformity Coefficient	≤1.6	≤1.6	≤1.6	≤1.6		
Average Diameter (µm)	300–1200	300-1200	425-1200	300-1200		
Specific Gravity*	1.11	1.13	1.19	1.05		
Shipping Weight (g/ℓ)*	670	700	720	635		
Max. Operating Temperature	80°C /176°F (Cl ⁻); 60°C / 140°F (OH ⁻)	60°C / 140°F (Cl ⁻); 40°C / 104° (OH ⁻)	120°C / 248°F	60°C / 140°F		
Operating pH Range	0–14	0–14	4–14 0–9			
Moisture Retention (%)	42–48	40-50	45-55 48-58			
Swelling Rate*	24% (Cl ⁻ \rightarrow OH ⁻)	$15\% (Cl^2 \rightarrow OH^2)$	$10\% (H^+ \rightarrow Ca^{2+})$	20% (FB \rightarrow Cl ⁻)		

*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 customer's workplace and disposal practices are in compliance with applicable 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

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www.lgwatersolutions.com



LG QuantumPure[™]

The Choice for High-Performance Ion Exchange Resins





LG Water Solutions

QuantumPure[™] offers a comprehensive selection of high-performance ion exchange (IX) resins, including SAC, SBA, WAC, WBA, and mixed bed resins in various ionic forms, designed for 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 ensure consistent quality, excellent chemical resistance, and extended service life, reducing the frequency of replacements and maintenance. As part of the LG Water Solutions portfolio, QuantumPure™ IX resins promise the benefits of a globally trusted brand renowned for innovation and quality.

Premium IX Resins with Uniform Particle Size

Exceptional Uniformity:

Uniformity coefficient below 1.1 (WBA: ≤1.2) for reliable performance every time.

Rigorous Quality Control:

Meets the highest quality control standards to maximize efficiency and durability.

Enhanced System Performance:

Engineered to enhance system performance with superior exchange capacity and extended service cycles, ensuring long-term reliability and reduced operational costs.

Flexible Applications:

Available in SAC, SBA, and WBA resin types, designed for versatile applications across a wide array of water treatment needs.

Product Name	QuantumPure™ UC-08	QuantumPure™ UC-08 H	QuantumPure™ UC-10	QuantumPure™ UC-10 H			
Resin Type	SAC						
Matrix	Styrene-divinylbenzene, Gel						
Functional Group		Sulfon	ic Acid				
Ionic Form	Na⁺	H⁺	Na ⁺	H⁺			
Total Capacity, min. (eq/ℓ)	2.00	1.80	2.20	2.00			
Uniformity Coefficient	≤1.1						
Average Diameter (µm)	600±50	620±50	650±50	660±50			
Specific Gravity*	1.28	1.20	1.32	1.22			
Shipping Weight (g/ℓ)*	840	800 830		800			
Max. Operating Temperature	120°C / 248°F						
Operating pH Range	0-14						
Moisture Retention (%)	43–49	50–56	38–44	45–51			
Swelling Rate*	9% (Na	$H^+ \rightarrow H^+$)	8% (Na ⁺ \rightarrow H ⁺)				

Product Name	QuantumPure™ UA-10	QuantumPure™ UA-10 OH	QuantumPure™ UA-12	QuantumPure™ UA-12 OH	QuantumPure™ UA-20	QuantumPure™ UWA-80	
Resin Type		WBA					
Matrix		Styrene- divinylbenzene, Porous					
Functional Group		Dimethylethanol Trimethyl Ammonium (Type 1) (Type 2)					
Ionic Form	Cl	OH	Cl	OH	Cl	Free Base	
Total Capacity, min. (eq/l)	1.35	1.10	1.30	1.00	1.30	1.60	
Uniformity Coefficient	≤1.1	≤1.1	≤1.1	≤1.1	≤1.1	≤1.2	
Average Diameter (µm)	550±50	590±50	575±50	620±50	575±50	500±100	
Specific Gravity*	1.08	1.07	1.08	1.07	1.11	1.04	
Shipping Weight (g/l)*	670	655	670	660	690	615	
Max. Operating Temperature	80°C / 176°F (CI'); 60°C / 140°F (CI'); 60°C / 140°F (OH') 40°C / 104°F (OH')					60°C / 140°F	
Operating pH Range	0–14	0–14	0–14	0–14	0–14	0—9	
Moisture Retention (%)	43–49	59–65	49–55	62–70	45–51	55–60	
Swelling Rate*	$23\% (Cl^{-} \rightarrow OH^{-}) \qquad 24\% (Cl^{-} \rightarrow OH^{-}) \qquad 14\% (Cl^{-} \rightarrow OH^{-})$						

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IX Resins for Mixed Bed

Ready-to-Use:

Mixed resins engineered for efficient, convenient production of high-purity water. Flexible Resin Size Options:

Available in both uniform particle size and Gaussian distribution types to meet diverse treatment needs. **Optimized for Ultrapure Water Applications:**

UPS type optimized as a final polisher in ultrapure water applications, ensuring the highest levels of water purity.

Product Name			mPure™ ′-100		QuantumPure™ UPW-200		ımPure™ /-300			mPure™ -400
Matrix					lbenzene, G	iel				
Functional Group		Sulfonic Acid	Type 1 (Trimethylammonium	Sulfoni Acid	ic Type 1 (Trimethylammonium)	Sulfonic Acid	Type 1 (Trimethylammonium)	Sulfor Acio		Type 1 (Trimethylammonium
Ionic Form		H⁺	OH.	H⁺	OH-	H⁺	OH	H⁺		OH ⁻
Total Capacit	y, min. (eq/l)	1.9	1.0	1.9	1.0	1.9	1.0	1.9		1.0
Average Diar	meter (µm)	620±50	620±50	620±5	0 620±50	620±50	620±50	620±	50	620±50
Uniformity Co	pefficient	≤1.1	≤1.1	≤1.1	≤1.1	≤1.1	≤1.1	≤1.1	1	≤1.1
lonic	H⁺	99.0 Min	-	99.0 M	in -	99.0 Min	-	99.0 N	/lin	-
Conversion	OH.	-	95.0 Min	-	95.0 Min	-	95.0 Min	-		95.0 Min
(%)	Cl	-	1.0 Max	-	1.0 Max	-	1.0 Max	-		1.0 Max
Mixed Ratio			uivalents) : Anion		y equivalents) tion : Anion	1:1 (by equivalents) Cation : Anion				uivalents) : Anion
Inlet	Specific Flow Rate	SV	/30		SV30	S	/30	SV30		'30
Condition	Resistivity	>17.5	√Ω·cm	>1	7.5MΩ·cm	>17.5	MΩ·cm	>'	17.51	√Ω·cm
	TOC		-		<2 ppb	<2	ppb		<2	ppb
Outlet	Resistivity	Guarante MΩ·cm(ir	eed ≥18.0 n 30 min.)		Guaranteed ≥18.1 MΩ·cm(in 30 min.)		Guaranteed ≥18.2 MΩ·cm(in 30 min.)		Guaranteed ≥18.2 MΩ·cm(in 30 min.)	
Condition -	∆TOC		-		b (in 120min.)	<1 ppb(ir	180min.)	<1 pp	ob (in	180min.)
Product Name QuantumPur GMB-200					mPure™ 3-210		QuantumPure™ GMB-300			
Matrix				Styrene-diviny	ylbenzene, Gel					
Functional Group Sulfonic Acid		CIO	pe 1 lammonium)	Sulfonic Acid	Type 1 (Trimethylammo	ethylammonium)		ic Acid Type 1 (Trimethylammoniu		
Ionic Form		H⁺	(DH.	H⁺					OH
Average Diameter (µm)		300-1,20	0 300-	-1,200	300-1,200	300-1,20	00 300-			00–1,200
Uniformity Co		≤1.6	≤	1.6	≤1.6	≤1.6	≤1	≤1.6		≤1.6
lonic	H⁺	99.0 Mir	1	-	99.0 Min	-	99.0	0 Min		-
Conversion	OH		90.	0 Min	-	95.0 Mir	n -	-	95.0 Min	
(%)	Cl			Max	-	1.0 Max				1.0 Max
Mixed Ratio			oy equivalen ation : Anion	ts)	1:1 (by equivalents) Cation : Anion		1	1:1 (by equivalents) Cation : Anion		,
Inlet Condition	Specific Flow Rate		SV36		SV36			SV36		
Condition	Conductivity	-	150 µs/cm		150 µs/cm			10 µs/cm		1
Outlet Condition	Resistivity	Guaranteed: ≥10.0 MΩ·cm (in 10min.) Actual: ≥15.0 MΩ·cm (in 10min.)			(in 10 Actual: ≥1	Dmin.)		ranteed: ≥15.0 MΩ·cm (in 10min.) ctual: ≥17.0 MΩ·cm (in 10min.)		
Product Name		umPure™ 30				mPure™ ∙70				
Resin Type			li	nert		Inert				
Matrix		Meth	yl Methacry	late-diviny	nylbenzene Polyethyler			hylene		
Average Diar	meter (µm))-900	≥1200			-		
Specific Grav				3–1.15						
	5			0.85–0.95						

500-600 90°C / 194°F 0–14 Top layer in packed bed system

for resin leakage prevention

and regenerant chemicals dispersion.

Product Name Matrix		Quantu UPW			ntumPure™ PW-200		mPure™ /-300		ntumPure™ PW-400	
			Styrene-divinylbenzene, Gel							
Functional Group		Sulfonic Acid	Type 1 (Trimethylammonium)	Sulfonic Acid	Type 1	Sulfonic Acid	Type 1 (Trimethylammonium)	Sulfonio Acid	Type 1	
Ionic Form		H⁺	OH	H⁺	OH.	H⁺	OH ⁻	H⁺	OH ⁻	
Total Capacit	y, min. (eq/l)	1.9	1.0	1.9	1.0	1.9	1.0	1.9	1.0	
Average Diar	meter (µm)	620±50	620±50	620±50	620±50	620±50	620±50	620±50	620±50	
Uniformity Co	pefficient	≤1.1	≤1.1	≤1.1	≤1.1	≤1.1	≤1.1	≤1.1	≤1.1	
lonic	H⁺	99.0 Min	-	99.0 Mir	י -	99.0 Min	-	99.0 Mir	- ו	
Conversion	OH.	-	95.0 Min	-	95.0 Min	-	95.0 Min	-	95.0 Min	
(%)	Cl	-	1.0 Max	-	1.0 Max	-	1.0 Max	-	1.0 Max	
Mixed Ratio		1:1 (by eq Cation	uivalents) : Anion		equivalents) on : Anion		quivalents) : Anion		equivalents) on : Anion	
Inlet	Specific Flow Rate	SV	30		SV30	S\	/30	SV30		
Condition	Resistivity	>17.5N	/lΩ·cm	>17	.5MΩ·cm	>17.5	MΩ·cm	>17	.5MΩ·cm	
	TOC			<	<2 ppb	<2	ppb	<2 ppb		
Outlet	Resistivity		Guaranteed ≥18.0 MΩ·cm(in 30 min.)		canteed ≥18.1Guaranteedcm(in 30 min.)MΩ·cm(in 30			Guaranteed ≥18.2 MΩ·cm(in 30 min.)		
Condition -	∆TOC			<5 ppb	b (in 120min.) <1 ppb(in 180m		n 180min.)	.) <1 ppb (in 180min.)		
Product Name			QuantumPure™ GMB-200		QuantumPure™ GMB-210			QuantumPure™ GMB-300		
Matrix					Styrene-diviny	Ibenzene, G	iel			
Functional Group		Sulfonic A	30 21	e 1 mmonium)	Sulfonic Acid	Type 1 (Trimethylammo	nium) Sulfon	ic Acid (Type 1 Trimethylammonium)	
Ionic Form		H⁺	0	H	H⁺	OH	H	*	OH	
Average Diameter (µm)		300-1,20	0 300-	1,200	300-1,200	300-1,20	0 300-	1,200	300-1,200	
Uniformity Co	pefficient	≤1.6	≤1	.6	≤1.6	≤1.6	≤1	.6	≤1.6	
lonic	H⁺	99.0 Mir	1	-	99.0 Min	-	99.0	Min	-	
Conversion	OH ⁻	-	90.0	Min	-	95.0 Mir	า -		95.0 Min	
(%)	Cl	-		Max	-	1.0 Max			1.0 Max	
Mixed Ratio		•	oy equivalent ation : Anion	s)	1:1 (by equivalents) Cation : Anion		1	1:1 (by equivalents) Cation : Anion		
Inlet Condition	Specific Flow Rate		SV36		SV36			SV36		
Condition	Conductivity	1	50 µs/cm		150 µs/cm			10 µs/cm		
Outlet	Resistivity		eed: ≥10.0 M in 10min.)			≥10.0 MΩ·cm Gua 0min.)		ranteed: ≥15.0 MΩ·cm (in 10min.)		
Condition	Resistivity		l: ≥15.0 MΩ·α in 10min.)	m	Actual: ≥15.0 MΩ·cm (in 10min.)		n Actual: ≥17.0 MΩ·cm (in 10min.)			
D		QuantumPure™				QuantumPure™				
Product Nar	ne		IR-30			IR-70				
Resin Type				ert				ert		
Matrix		Meth	yl Methacryla		penzene	Polyethylene				
Average Diar				-900		≥1200				
Specific Grav	/itv*	1.13–1.15				0.85-0.95				

Product Name	QuantumPure™ IR-30				
Resin Type	Inert				
Matrix	Methyl Methacrylate-divinylbenzene				
Average Diameter (µm)	700–900				
Specific Gravity*	1.13–1.15				
Shipping Weight (g/ℓ)*	670–720				
Max. Operating Temperature	100°C / 212°F				
Operating pH Range	0–14				
Application	Boundary layer in a mixed bed system for resin layer separation.				

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