

DOWEX UPCORE Mono C-600

A Uniform Particle Size, Strong Acid Cation Exchange Resin Specifically Designed for the UPCORE System

Product	Type	Matrix	Functional group
DOWEX* UPCORE* Mono C-600	Strong acid cation	Styrene-DVB, gel	Sulfonic acid

Guaranteed Sales Specifications		Na ⁺ form	H ⁺ form
Total exchange capacity, min.	eq/l	2.0	1.8
	kg/ft ³ as CaCO ₃	43.7	39.3
Water content	%	42 - 48	50 - 56
Bead size distribution†			
Mean particle size	µm	585 ± 50	600 ± 50
Uniformity coefficient, max.		1.1	1.1
> 850 µm, max.	%	5	5
< 300 µm, max.	%	0.5	0.5
Whole uncracked beads, min.	%	95	95

Typical Physical and Chemical Properties		Na ⁺ form	H ⁺ form
Total swelling (Na ⁺ → H ⁺)	%	8	8
Particle density	g/ml	1.28	1.22
Shipping weight	g/l	820	800
	lbs/ft ³	51	50

Recommended Operating Conditions	• Maximum operating temperature	120°C (250°F)
	• pH range	0 - 14
	• Bed depth, min.	1,200 mm (4 ft)
	• Pressure drop, design max.	1.5 bar (22 psi)
	• Pressure drop, max.	2.5 bar (37 psi)
	• Flow rates:	
	Service/fast rinse	5-60 m/h (2-24 gpm/ft ²)
	Regeneration/displacement rinse	5-20 m/h (2-8 gpm /ft ²)
• Total rinse requirement	2 - 5 Bed volumes	
• Regenerant	8-12% NaCl, 4-6% HCl, or 1-4% H ₂ SO ₄ ,	

DOWEX is a Trademark of The Dow Chemical Company ("Dow") or an affiliated company of Dow

Typical Properties and Applications

DOWEX UPCORE Mono C-600 strong acid cation exchange resin is a uniform particle size resin specifically designed for use in the UPCORE packed bed counter-current regeneration system. It is well suited for use in both demineralization and softening applications.

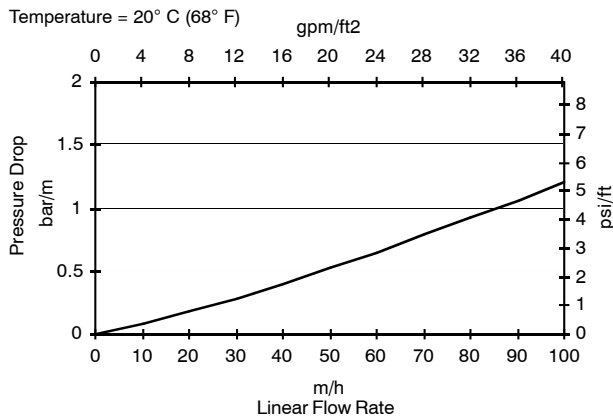
DOWEX UPCORE Mono C-600 resin has a smaller average particle diameter than conventional polydispersed cation resin. Its smaller, uniform size enhances operating capacity and regeneration efficiency while maintaining a moderate pressure drop.

DOWEX UPCORE Mono C-600 resin also has outstanding resistance to attrition due to compressive and osmotic stress.

Packaging

25 liter bags or 5 cubic feet fiber drums

Figure 1. Pressure Drop Data



For other temperatures use:

$$P_T = P_{20^{\circ}\text{C}} / (0.026 T_{\text{C}} + 0.48), \text{ where } P = \text{bar/m}$$

$$P_T = P_{68^{\circ}\text{F}} / (0.014 T_{\text{F}} + 0.05), \text{ where } P = \text{psi/ft}$$

DOWEX is a Trademark of The Dow Chemical Company ("Dow") or an affiliated company of Dow

LENNTECH, WATER TREATMENT AND AIR purification

Rotterdamseweg 402M, 2629HH Delft, The Netherlands

Tel: +31(0)152610900 / Fax: +31(0)152616289

info@lenntech.com / <http://www.lenntech.com>