



DOWEX MARATHON C

A Uniform Particle Size, High Capacity Cation Exchange Resin for Softening and Demineralization Applications

Product	Type	Matrix	Functional group
DOWEX* MARATHON* C	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
	kgr/ft ³ as CaCO ₃	43.7	39.3
Water content	%	42 - 48	50 - 56
Uniformity coefficient, max.		1.1	1.1

Typical Physical and Chemical Properties		Na ⁺ form	H ⁺ form
Mean particle size [†]	μm	585 ± 50	600 ± 50
Whole uncracked beads	%	95 - 100	95 - 100
Total swelling (Na ⁺ → H ⁺)	%	8	8
Particle density	g/ml	1.28	1.20
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.	800 mm (2.6 ft)
Flow rates:	
Service/fast rinse	5-60 m/h (2-24 gpm/ft ²)
Backwash	See figure 1
Co-current regeneration/displacement rinse	1-10 m/h (0.4-4 gpm/ft ²)
Counter-current regeneration/displacement rinse	5-20 m/h (2-8 gpm/ft ²)
Total rinse requirement	2-5 Bed volumes
Regenerant	1-8% H ₂ SO ₄ , 4-8% HCl or 8-12% NaCl

[†]For additional particle size information, please refer to the Particle Size Distribution Cross Reference Chart (Form No. 177-01775/CH 171-476-E).

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DOWEX

Ion Exchange Resins

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