

DOWEX™ MARATHON™ MR-3

Uniform Particle Size, High Capacity, Mixed Ion Exchange Resin for Demineralization

Product	Туре	Matrix	Functional group
DOWEX™ MARATHON™ MR-3	1:1 by equivalents	Styrene-DVB, gel	Sulfonic acid
	cation:anion		Quaternary amine

Guaranteed Sales Specifications		OH- form	H+ form	
Total exchange capacity, min.	eq/L	1.0	1.9	
	kgr/ft³ as CaCO₃	21.9	41.5	
Water content	%	60 - 72	46 - 51	
Uniformity coefficient, max.		1.1	1.1	
Whole uncracked beads, min.	%	90	90	

Typical Physical and Chemical Properties		OH- form	H+ form
Mean particle size [†]	μm	610 ± 50	760 ± 50
Particle density	g/mL	1.06	1.22
Shipping weight	g/L	672	
	lbs/ft³		42

Recommended
Operating
Conditions

• Maximum operating temperature 60°C (140°F)

pH range 0 - 14

• Bed depth, min. 800 mm (2.6 ft)



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

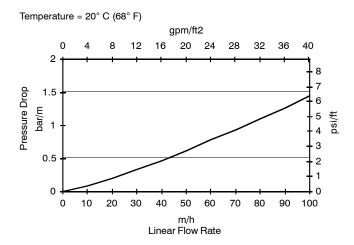
Typical properties and applications

DOWEX™ MARATHON™ MR-3 ion exchange resin is a 1:1 equivalent mixture of DOWEX MARATHON A (OH) anion and DOWEX MARATHON C-10 (H) cation resins. This product is a ready-to-use regenerable uniform particle size mixed resin for demineralization.

Packaging

25 liter bags or 5 cubic foot fiber drums

Figure 1. Pressure Drop Data



For other temperatures use:

 $P_T = P_{20^{\circ}C} / (0.026 \, T_{^{\circ}C} + 0.48)$, where P = bar/m $P_T = P_{68^{\circ}F} / (0.014 \, T_{^{\circ}F} + 0.05)$, where P = psi/ft

Warning: Oxidizing agents such as nitric acid attack organic ion exchange resins under certain conditions. This could lead to anything from slight resin degradation to a violent exothermic reaction (explosion). Before using strong oxidizing agents, consult sources knowledgeable in handling such materials.

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