



## DOWEX™ MARATHON™ MR-3

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

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

Guaranteed Sales Specifications		OH <sup>-</sup> form	H <sup>+</sup> form
Total exchange capacity, min.	eq/L	1.0	1.9
	kg/ft <sup>3</sup> as CaCO <sub>3</sub>	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 <sup>-</sup> form	H <sup>+</sup> form
Mean particle size <sup>†</sup>	μm	610 ± 50	760 ± 50
Particle density	g/mL	1.06	1.22
Shipping weight	g/L		672
	lbs/ft <sup>3</sup>		42

Recommended Operating Conditions	• Maximum operating temperature	60°C (140°F)
	• pH range	0 - 14
	• Bed depth, min.	800 mm (2.6 ft)

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

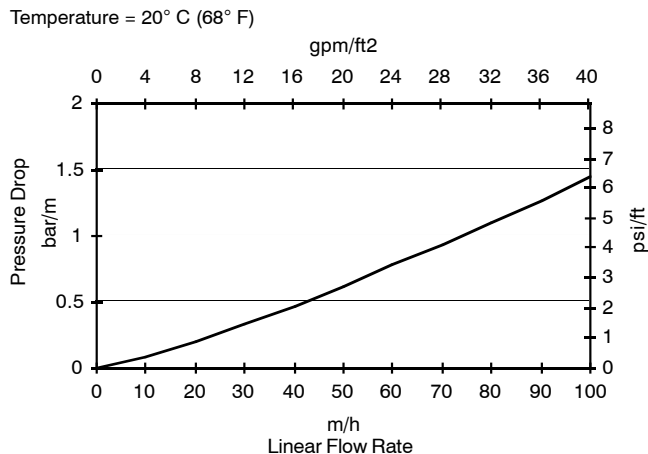
Typical properties and applications

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:

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

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

DOWEX Ion Exchange Resins  
For more information about DOWEX resins, call the Dow Liquid Separations business:

North America: 1-800-447-4369  
 Latin America: (+55) 11-5188-9222  
 Europe: (+32) 3-450-2240  
 Pacific: +60 3 7958 3392  
 Japan: +813 5460 2100  
 China: +86 21 2301 9000  
<http://www.dowex.com>

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.

Notice: No freedom from any patent owned by Seller or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time, Customer is responsible for determining whether products and the information in this document are appropriate for Customer's use and for ensuring that Customer's workplace and disposal practices are in compliance with applicable laws and other governmental enactments. Seller assumes no obligation or liability for the information in this document. NO WARRANTIES ARE GIVEN; ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED.

