DOWEX™ MB

A Cost Effective, Mixed Ion Exchange Resin for Making Spot-Free Water

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

Guaranteed Sales Specifications		OH^- form	H^+ form
Total exchange capacity, min.	eq/L	1.0	1.6
	kgr/ft^3 as $CaCO_3$	21.9	35.0
Water content	%	68 max.	40 - 60
Fines, < 300 microns, max.	%	1	1

Typical Physical and Chemical Properties		OH^- form	H^+ form
Mean particle size†	μm	500 - 850	500 - 950
Particle density	g/mL	1.06	1.20
Shipping weight	g/L	720	
	lbs/ft^3	45	

Recommended Operating Conditions

- Maximum operating temperature: 60°C (140°F)
- pH range: 0-14

Typical Properties and Applications

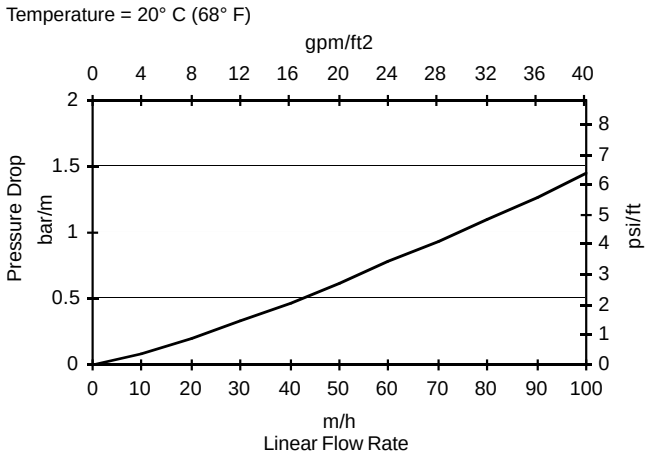
DOWEX™ MB ion exchange resin is a 1:1 equivalent mixture of strong acid cation and strong base anion exchange resin. This product is a ready-to-use mixed resin for the economical production of spot free water. DOWEX MB will typically produce between 500 and 700 gal of spot free water/cubic foot [66 to 90 liters water per liter of resin] (depending on the salt load). DOWEX MB is also the ideal choice for single-use industrial applications, where conductivity of <1 μS/cm can be obtained. DOWEX MB has been optimized for single-use applications, and is typically discarded upon exhaustion.

Packaging

5 cubic foot fiber drums

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

Figure 1. Pressure Drop Data



For other temperatures use:

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

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

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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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