

# MAGNA

## MAG-MB

MIXED BED

**GENERAL PURPOSE MIXED BED  
POLYSTYRENIC GEL  
H / OH FORM**

ResinTech MAG-MB is a 1:1 volumetric mixture of CG8-H (amber-colored hydrogen form strong acid cation resin) and SBG1P-OH (hydroxide form type 1 porous strong base anion resin). MAG-MB is designed for applications where a pH-balanced mixed bed is not required. MAG-MB is intended for general purpose deionizing applications such as EDM operations and spot-free rinsing.

### APPLICATIONS

- Electric Discharge Machining (EDM)
- Spot Free Rinse
- Window Washing

### TYPICAL PROPERTIES & PHYSICAL CHARACTERISTICS

<b>Polymer Matrix</b>	Styrenic Gel
<b>Ionic Form</b>	Hydrogen & Hydroxide
<b>Functional Group</b>	Sulfonic Acid / Trimethylamine
<b>Physical Form</b>	Spherical Beads
<b>Particle Size</b>	16 to 50 US Mesh (297 - 1190 µm)
<b>% &lt; 50 mesh (300µm)</b>	≤ 1%
<b>Reversible Swelling</b>	H <sup>+</sup> OH to Na/Cl -12% to -15%
<b>Temp Limit</b>	160°F (71°C)
<b>Capacity (meq/mL)</b>	0.45
<b>Moisture Retention</b>	52% to 62%
<b>Shipping Weight</b>	42 - 44 lbs/ft <sup>3</sup> (673 - 705 g/L)
<b>Color</b>	Amber & Amber
<b>Regenerability</b>	Yes

### PACKAGING OPTIONS

- 500 ml samples
- 1 ft<sup>3</sup> bags
- 1 ft<sup>3</sup> boxes
- 1 ft<sup>3</sup> drums
- 7 ft<sup>3</sup> drums
- 42 ft<sup>3</sup> supersacks

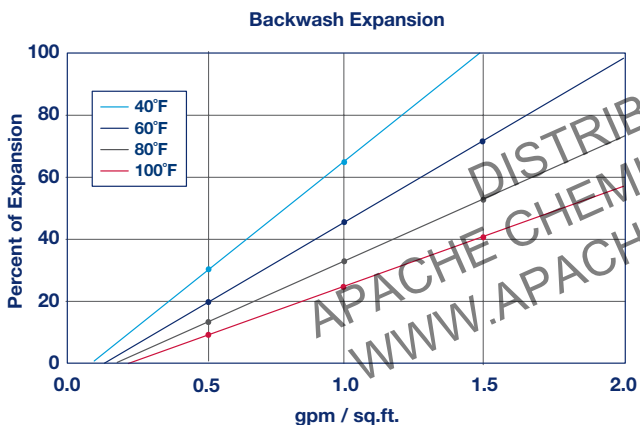
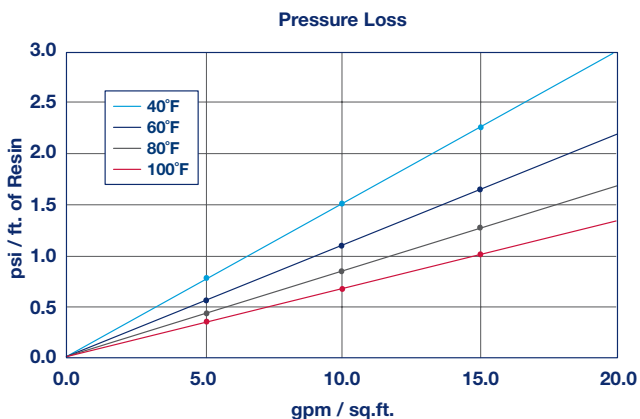


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THROUGHPUT CAPACITY (Gal/cu. ft.)			
TDS (ppm as CaO <sub>2</sub> ) Conductivity (uS/cm)	No CO <sub>2</sub> or SiO <sub>2</sub>	5 ppm CO <sub>2</sub> or SiO <sub>2</sub>	10 ppm CO <sub>2</sub> or SiO <sub>2</sub>
2/5	83,876	23,964	13,979
5/12.5	33,550	16,775	11,183
10/25	16,775	11,183	8,388
20/50	8,388	6,710	5,592
50/125	3,355	3,050	2,796
100/250	1,678	1,598	1,525
200/500	839	818	799
500/1250	336	332	329
1,000/2500	168	167	166

Mixed Bed throughput capacity is based on the stated inlet conductivity of neutral pH waters and run to a 100 uS/cm endpoint. TDS is based on NaCl (2.5uS/cm/ppm as CaCO<sub>3</sub>). Different salts may have different contributions to TDS. Capacity is based on the anion component and is for virgin resin. Following the initial exhaustion and regeneration subsequent cycles will likely be shorter, depending on how skillfully the resins are separated, regenerated, and remixed.

### SPOT FREE RINSE

ResinTech MAG-MB is used in a variety of spot free rinse applications to remove hardness, silica, and other ions that might cause spotting upon drying. The deionized water produced by MAG-MB has lower surface tension which helps prevent beading of water droplets on clean surfaces.

### EDM

ResinTech MAG-MB is the preferred resin for EDM and other devices that require deionized water for cooling and rinsing. The ratio is specially formulated to provide long throughputs and hardness-free deionized water. ResinTech provides PEDI regeneration services for spent MAG-MB, allowing the resin to be used over hundreds or thousands of exhaustion and regeneration cycles.

### SUGGESTED OPERATING CONDITIONS

Maximum continuous temperature	120°F
Minimum bed depth	24 inches
Backwash expansion	50 to 100 percent
Maximum pressure loss	25 psi
Operating pH range	2 to 12 SU
Service flow rate	1 to 5 gpm per cu. ft.

Note: These guidelines describe average low risk operating conditions. They are not intended to be absolute minimums or maximums. For operation outside these guidelines, contact ResinTech Technical Support

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