

# PRODUCT SPECIFICATION SHEET

## MAGNA MBD-35

MIXED BED

**STRONG BASE ANION  
POLYSTYRENIC GEL  
H / OH FORM**

ResinTech MBD-35 is a 2:3 volumetric mixture of CG8-H-ID (a dyed hydrogen form cation resin) and SBG1P-OH (a hydroxide form type 1 porous strong base anion resin). The cation component is infused with a permanent pH indicator dye that changes color from royal purple to amber as the resin exhausts. MBD-35 is intended for use in cartridge applications where a color indication of resin exhaustion is desired.

### APPLICATIONS

- Cartridge Applications
- Aquarium
- Steam Irons

### TYPICAL PROPERTIES & PHYSICAL CHARACTERISTICS

<b>Polymer Matrix</b>	Styrenic Macroporous
<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/OH to Na/Cl -15% to -17%
<b>Temp Limit</b>	250°F (121°C)
<b>Capacity (meq/mL)</b>	0.6
<b>Moisture Retention</b>	53% to 62%
<b>Shipping Weight</b>	42 - 44 lbs/ft <sup>3</sup> (673 - 705 g/L)
<b>Color</b>	Amber & Purple
<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

Revision 1.0  
ResinTech, Inc.®

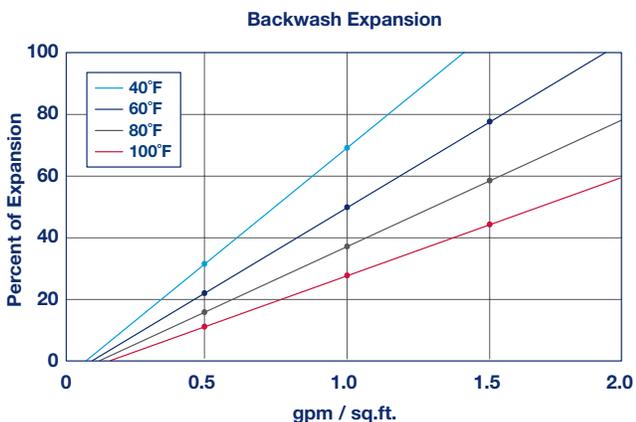
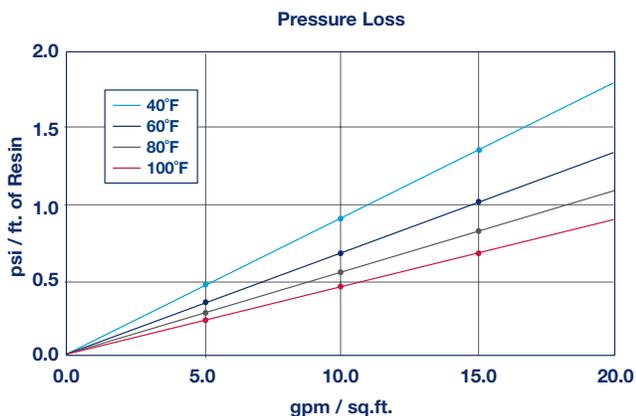


# MAGNA

## MBD-35

MIXED BED

**STRONG BASE ANION  
POLYSTYRENIC GEL  
H / OH FORM**



### CARTRIDGE USE

ResinTech MBD-35 premixed mixed bed is ideal for single use cartridge applications where the longest possible throughput capacity is desired. The cation component of MBD-35 is dyed purple and turns amber in color as the resin exhausts, providing a visual indication of resin life remaining. The ratio of anion to cation resin is optimized to provide balanced exchange of both cations and anions as well as to maximize throughput.

THROUGHPUT CAPACITY (Gal/cu. ft.)			
TDS (ppm as CaO <sub>3</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>
<b>2/5</b>	111,834	31,953	18,639
<b>5/12.5</b>	44,734	22,367	14,911
<b>10/25</b>	22,367	14,911	11,183
<b>20/50</b>	11,183	8,947	7,456
<b>50/125</b>	4,473	4,067	3,728
<b>100/250</b>	2,237	2,130	2,033
<b>200/500</b>	1,118	1,091	1,065
<b>500/1250</b>	447	443	439
<b>1,000/2500</b>	224	223	221

Mixed Bed throughput capacity is based on the stated inlet conductivity of neutral pH waters and run to a 1 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.

### SUGGESTED OPERATING CONDITIONS

Maximum continuous temperature	140°F
Minimum bed depth	24 inches
Backwash expansion	50 to 75 percent
Maximum pressure loss	25 psi
Operating pH range	2 to 12 SU
Service flow rate	
Working	1 to 5 gpm per cu. ft.
Polishing	3 to 15 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

Revision 1.0  
ResinTech, Inc.®

