PRODUCT SPECIFICATION SHEET

MAGNA

MBD-30

MIXED BED

COLOR-INDICATING
HIGH-CAPACITY MIXED BED
POLYSTYRENIC GEL
H / OH FORM

ResinTech MBD-30 is a 1:1 volumetric mixture of CG8-H (an amber-colored hydrogen form cation resin) and SBG1P-OH-ID (a dyed hydroxide form type 1 porous strong base anion resin). The anion component is infused with a permanent pH indicator dye that changes color from blue to amber as the resin exhausts. MBD-30 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	
Polymer Matrix	Styrenic Macroporous
Ionic Form	Hydrogen & Hydroxide
Fuctional Group	Sulfonic Acid / Trimethylamine
Physical Form	Spherical Beads
Particle Size	16 to 50 US Mesh (297 - 1190 µm)
% < 50 mesh (300µm)	< 1%
Reversible Swelling	H/OH to Na/Cl -15% to -17%
Temp Limit	250°F (121°C)
Capacity (meq/mL)	0.43
Moisture Retention	52% to 62%
Shipping Weight	42 - 44 lbs/ft³ (673 - 705 g/L)
Color	Amber & Blue
Regenerability	Yes

PACKAGING OPTIONS

- 500 ml samples
- 1 ft³ bags
- 1 ft³ boxes
- 1 ft³ drums
- 7 ft³ drums
- 42 ft³ supersacks

Revision 1.0

MADE IN AMERICA

RESINTECH® INC.
INNOVATIONS IN ION EXCHANGE

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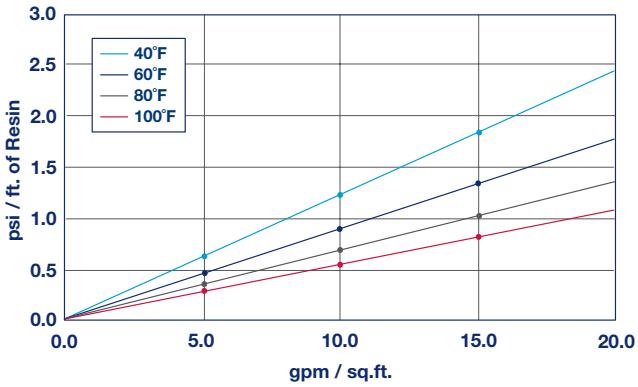
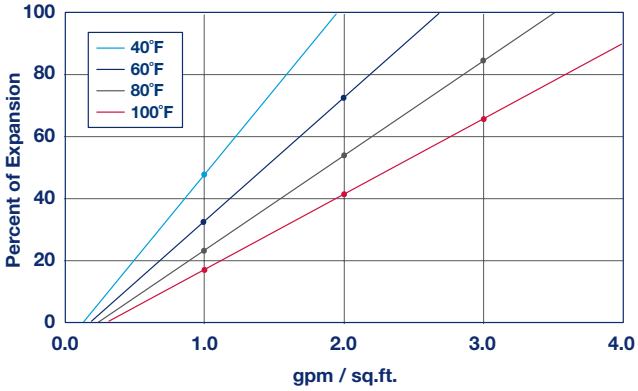
Pressure Loss



Backwash Expansion



CARTRIDGE USE

ResinTech MBD-30 premixed mixed bed resin is ideal for single use cartridge applications where visual indication of exhaustion is desired. The anion component of MBD-30 is dyed dark blue and turns amber in color as the resin exhausts. The ratio of anion to cation resin is optimized to provide balanced exchange of both cations and anions and to ensure the resin changes color as it exhausts.

THROUGHPUT CAPACITY (Gal/cu. ft.)			
TDS	No CO_2 or SiO_2	5 ppm CO_2 or SiO_2	10 ppm CO_2 or SiO_2
2	93,195	26,627	15,533
5	37,278	18,639	12,426
10	18,639	12,426	9,320
20	9,320	7,456	6,213
50	3,728	3,389	3,107
100	1,864	1,775	1,694
200	932	909	888
500	373	369	365
1,000	186	185	185

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 $CaCO_3$). Different salts may have different contributions to TDS. Capacity is based on the anion component and is for virgin resin. Following the initital exhaustion and regeneration subsequent cycles will likely be shorter, depending on how skillfully the resins are separated, regenerated, and remixed.

AQUARIUM USE

ResinTech MBD-30 is ideal for aquarium applications were a color change is useful to indicate resin exhaustion.

SUGGESTED OPERATING CONDITIONS

Maximum continuous temperature	140˚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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