PRODUCT SPECIFICATION SHEET

MAGNA

MBD-100

MIXED BED

COLOR-INDICATING MIXED BED
POLYSTYRENIC GEL
HYDROGEN & FREE BASE FORM

ResinTech MBD-100 is a 2:3 volumetric mixture of CG8-H-ID (a dyed hydrogen form cation resin) and WBMP (a free base form macroporous weak base anion resin). The cation component is dyed royal purple and changes color as it exhausts. MBD-100 is intended for cartridge and other single-use applications where carbon dioxide and silica removal is not required, where high resistivity is not needed, and where a color indication of resin exhaustion is desired.

APPLICATIONS

- Cartridge Applications (Removal of CO_2 and SiO_2 is not required)
- Bulk Ion Removal

TYPICAL PROPERTIES & PHYSICAL CHARACTERISTICS	
Polymer Matrix	Styrenic Gel
Ionic Form	Hydrogen & Free Base
Functional Group	Sulfonic Acid / Dimethylamine
Physical Form	Spherical Beads
Particle Size	16 to 50 US Mesh (297 - 1190 µm)
% < 50 mesh (300µm)	< 1%
Temp Limit	250°F (121°C)
Capacity (meq/mL)	0.7
Moisture Retention	55% to 60%
Shipping Weight	44 - 46 lbs/ft³ (721 - 753 g/L)
Color	Amber & Amber

PACKAGING OPTIONS

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

Revision 1.0
ResinTech, Inc.

MADE IN AMERICA

RESINTECH® INC.
INNOVATIONS IN ION EXCHANGE

CORPORATE HEADQUARTERS 1801 Federal Street Camden, NJ 08105 USA PHONE 856.768.9600 EMAIL info@resintech.com WEB resintech.com

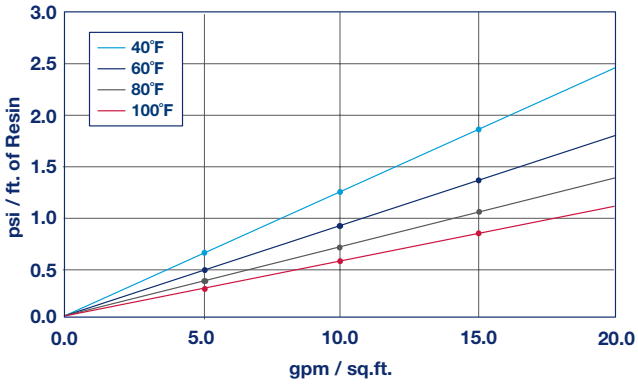
MAGNA

MBD-100

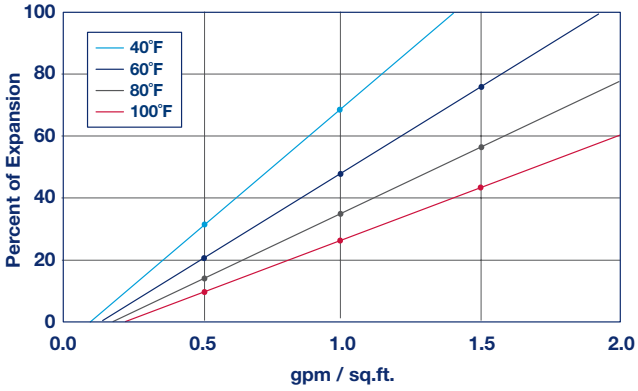
MIXED BED

COLOR-INDICATING MIXED BED
POLYSTYRENIC GEL
HYDROGEN & FREE BASE FORM

Pressure Loss



Backwash Expansion



THROUGHPUT CAPACITY (Gal/cu. ft.)	
TDS (ppm as CaO_3) Conductivity (uS/cm)	**No CO_2 or SiO_2**
2/5	130,473
5/12.5	52,189
10/25	26,095
20/50	13,047
50/125	5,219
100/250	2,609
200/500	1,305
500/1250	522
1,000/2500	261

Mixed Bed throughput capacity is based on the stated inlet conductivity of neutral pH waters and run to a 50 uS/cm endpoint. MBD-100 does not remove carbon dioxide or silica. No engineering downgrade has been applied.

SUGGESTED OPERATING CONDITIONS

Maximum continuous temperature	175˚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	
Working	1 to 2 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

CARTRIDGE USE

ResinTech MBD-100 mixed bed uses a weakly basic anion exchange resin (WBMP) and a purple cation component (CG8-H-ID). MBD-100 is ideal for single use cartridge applications where the longest possible throughput capacity is desired and where silica removal and high resistivity are not needed. The cation component of MBD-100 is dyed royal 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 and ensure the resin changes color as it exhausts.

Revision 1.0
ResinTech, Inc.®

RESINTECH® INC.
INNOVATIONS IN ION EXCHANGE

CORPORATE HEADQUARTERS 1801 Federal Street Camden, NJ 08105 USA PHONE 856.768.9600 EMAIL info@resintech.com WEB resintech.com