

MAGNA MBD-15-ULTRA

MIXED BED

**ULTRA-HIGH PURITY MIXED BED
POLYSTYRENIC GEL
H / OH FORM**

ResinTech MBD-15-ULTRA is a 2:3 volumetric mixture of CG8-H-BL (a dark-colored hydrogen form cation resin) and SBG1P-OH (a hydroxide form type 1 porous strong center anion resin). The ULTRA grade means it has been functionally tested to produce > 18 megohm resistivity and under 2 ppb of TOC. MBD-15-ULTRA is intended for use in all mixed bed deionization applications that require high resistivity and high throughput capacity.

APPLICATIONS

- Portable Exchange Deionization (PEDI)

TYPICAL PROPERTIES & PHYSICAL CHARACTERISTICS

| | |
|-------------------------------|---|
| Polymer Matrix | Styrenic Gel |
| Ionic Form | Hydrogen & Hydroxide |
| Functional 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 | 140°F (60°C) |
| Capacity (meq/mL) | 0.55 |
| Moisture Retention | 57% to 65% |
| Shipping Weight | 42 - 44 lbs/ft ³ (673 - 705 g/L) |
| Color | Brown / Black & Amber |
| 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
ResinTech, Inc.®

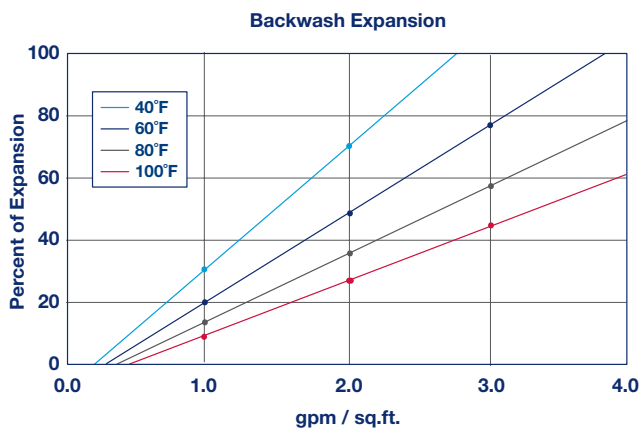
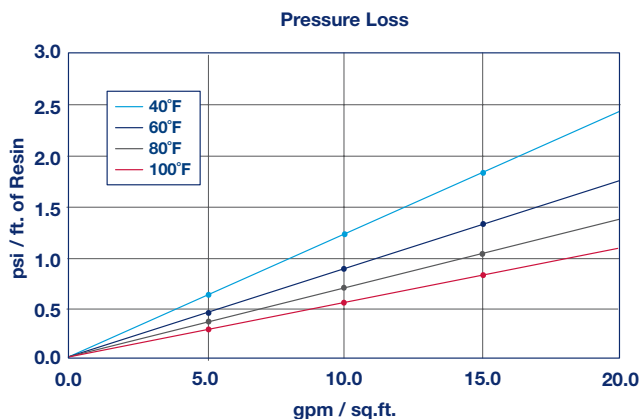


MAGNA

MBD-15-ULTRA

MIXED BED

ULTRA-HIGH PURITY MIXED BED
POLYSTYRENIC GEL
H / OH FORM



ULTRAPURE WATER

ResinTech MBD-15 ULTRA is a mixed bed ion exchange resin that has been optimized in every respect to produce the highest possible water quality. The cation and the anion components are very highly regenerated and then post-treated using a proprietary process to remove traces of TOC leachables and other undesirable contaminants. The use of black cation resin with uniform bead size along with a slightly smaller anion bead size, helps produce a sharp separation that is easy to see, greatly simplifying the regeneration process.

MAXIMUM IMPURITIES

| | | |
|---|--|---------------|
| Metallic Impurities (moist basis) | | |
| Sodium (Na) ppm | | < 40 |
| Iron (Fe) ppm | | < 50 |
| Copper (Cu) ppm | | < 10 |
| Aluminum (Al) ppm | | < 30 |
| Calcium (Ca) ppm | | < 30 |
| Magnesium (Mg) ppm | | < 30 |
| Heavy metals (Pb) ppm | | < 10 |
| Anionic Impurities | | |
| Equivalent percent Chloride (% Cl) | | < 0.2 |
| Equivalent percent Sulfate (% SO ₄) | | < 0.2 |
| Equivalent percent Hydroxide (% OH) | | > 95 |
| Leachable TOC | | |
| BV's rinse (at 0.5 BV/min) | | (Max ppb TOC) |
| 25 | | 25 |
| 50 | | 5 |
| 100 | | 1 |

SUGGESTED OPERATING CONDITIONS

| | |
|----------------------------------|-------------------------|
| Maximum continuous temperature | 140°F |
| Maximum intermittent temperature | 180°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 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.®

