MBD-15-ULTRA

Grade: Ultra

Mixed bed resin, styrene/DVB gel, ultra purity grade, hydrogen & hydroxide form

ResinTech MBD-15-ULTRA is a mixture of a dark-colored hydrogen form cation resin and a hydroxide form type 1 strong base anion resin. The resin ratio is 1:1 on an equivalent basis. 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.

FEATURES & BENEFITS

- Rapid rinse to quality
- Certified performance testing
- Cation and anion components available separately
- Special packaging available to extend shelf life

APPLICATIONS

- Cartridge Applications
- Demineralization / DI
- Portable Exchange Deionization (PEDI)

COMPONENT 1

Media & Volumetric %	60% SBG1P-OH
Media Category	Strong Base Anion
Polymer Type	Gel
Polymer Matrix	Styrene/DVB
Functional Group	Trimethylamine
Ionic Form	Hydroxide (OH^-)
Physical Form	Spherical Beads
Capacity	1.00
Moisture Retention (%)	52 to 60
Media Color	Yellow to Orange

COMPONENT 2

Media & Volumetric %	40% CG8-H-BL
Media Category	Strong Acid Cation
Polymer Type	Gel
Polymer Matrix	Styrene/DVB
Functional Group	Sulfonic Acid
Ionic Form	Hydrogen (H^+)
Physical Form	Spherical Beads
Capacity	1.80
Moisture Retention (%)	47 to 56
Media Color	Dark Brown to Black

PHYSICAL PROPERTIES

Particle Size	16-50 US mesh (297-1190µm)
< 50 mesh (300 µm) %	< 1%
Reversible Swelling	12 to 17% (H+/OH- → Na+/Cl-)
Shipping Weight	42 - 44 lbs/cu.ft. (673 - 705 g/L)

SUGGESTED OPERATING CONDITIONS

Maximum Temperature	140°F (60°C)
Minimum Bed Depth	24 in. (61.0 cm)
Maximum Pressure Loss	25 psi (172 kPa)
Operating pH Range	2.0 to 12.0
Flow Rate	
Working Service	1-5 gpm/cu.ft. (8-40 BV/h)
Polishing	3-15 gpm/cu.ft. (24-120 BV/h)

RESINTECH® INC.
INNOVATIONS IN ION EXCHANGE

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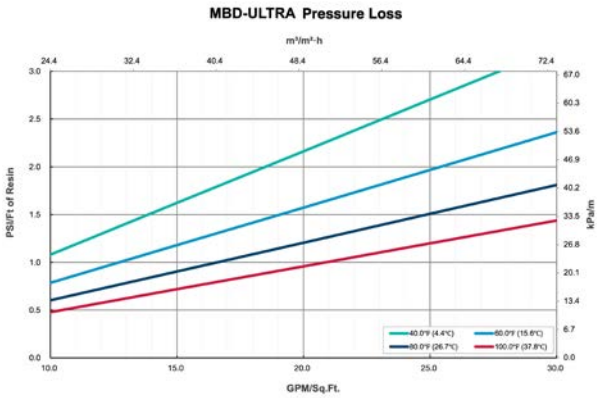
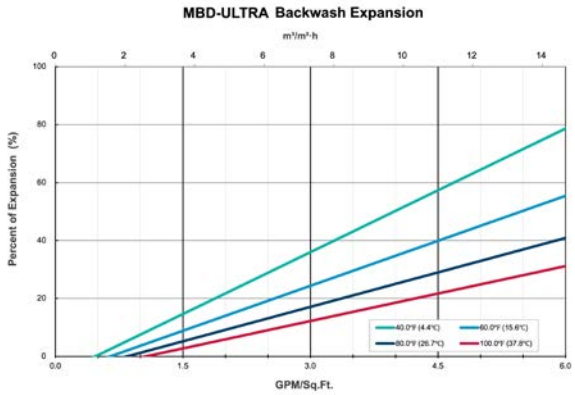
PRESSURE LOSS



The graph above shows the expected pressure loss of ResinTech MBD-15-ULTRA per foot of bed depth as a function of flow rate at various temperatures.

BACKWASH EXPANSION



The graph above shows the expansion characteristics of ResinTech MBD-15-ULTRA as a function of flow rate at various temperatures.

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 leachable TOC 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. **MBD-15 ULTRA** can be used once in ultrapure polishing loops and then reused in lower grade PEDI applications or can be supplied as separate components to match the location of fixed place distributors in systems that have in-place regeneration.

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 (% SO4) < 0.2

Equivalent percent Hydroxide (% OH) > 95

Leachable TOC

BVs rinse (at 0.5 BV/min) (Max ppb TOC)

25 BV 25

50 BV 5

100 BV 1

Lot certification is available and is provided when specified in purchase agreement.

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MBD-15-ULTRA

CERTIFICATIONS

REACH Registered

Conforms to §21CFR173.25 of the USFDA Food Additives Regulations

PACKAGING

Standard

7 cu.ft. Drum | 42 cu.ft. Supersack

200L Drum | 1000L Supersack

Metric

1 cu.ft. Bag | 5 cu.ft. Drum

25L Bag | 140L Drum

Shipping Weight

42 - 44 lbs/cu.ft. (673 - 705 g/L)

MATERIAL SAFETY DATA SHEETS (MSDS)

Material Safety Data Sheets (MSDS) are available for all products on the ResinTech website. They contain important health and safety information that may be needed to protect your employees and customers from any known health and safety hazards associated with our products. We recommend that you secure and study the pertinent MSDS for our products and any other products being used.

These suggestions and data are based on information we believe to be reliable. They are offered in good faith. However we do not make any guarantee or warranty. We caution against using these products in an unsafe manner or in violation of any patents; further we assume no liability for the consequences of any such actions.

Safety Data Sheets (SDS) are available at resintech.com

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