

## MBD-10-ULTRA

### Mixed bed resin, styrene/DVB gel, high capacity & high-purity, hydrogen & hydroxide form

ResinTech MBD-10-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-10-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)



REACH Registered

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

MBD-10-ULTRA

Polymer Matrix	Styrene/DVB	< 50 mesh (300 µm) %	< 1%
Polymer Type	Gel	Reversible Swelling	12 to 17% (H+/OH- → Na+/Cl-)
Component(s)	60% SBG1-OH,40% CG8-H-BL	Uniformity	Gaussian
Ionic Form (as shipped)	Hydrogen & Hydroxide (H <sup>+</sup> / OH <sup>-</sup> )	Capacity (meq/mL)	0.60
Physical Form	Spherical Beads	Moisture Retention (%)	53 to 65
Particle Size US Mesh (µm)	16 (1190) to 50 (297)	Shipping Weight	42 - 44 lbs/cu.ft. (673 - 705 g/L)
		Color	Amber Dark Brown to Black

**SUGGESTED OPERATING CONDITIONS**

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



**ULTRAPURE WATER**

ResinTech MBD-10 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. MBD-10 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



**PACKAGING****Standard**

7 cu.ft. Drum | 42 cu.ft. Supersack  
1 cu.ft. Bag | 5 cu.ft. Drum

**Metric**

25L Bag | 140L Drum

**COMPONENT MEDIA**

60% SBG1-OH,40% CG8-H-BL

**SAFETY DATA SHEETS (SDS)**

Safety Data Sheets (SDS) 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](https://resintech.com)

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