

MBD-10-LTOC

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

ResinTech MBD-10-LTOC 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 LTOC grade means it has been functionally tested to produce >18 megohm resistivity and under 10 ppb of TOC. MBD-10-LTOC is intended for use in all mixed bed deionization applications that require high resistivity, high throughput capacity and low total organic carbon.



FEATURES & BENEFITS

- Ultrapure performance
- Ease of separation
- Superior thermal and physical stability
- Ideal for portable exchange DI systems
- Complies with US FDA regulations

APPLICATIONS

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



REACH Registered

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

MBD-10-LTOC

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+ / OH-)	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		

PORTABLE EXCHANGE DEIONIZATION (PEDI)

ResinTech MBD-10 LTOC can be used in PEDI applications to remove bulk TDS from raw waters or to remove trace levels of TDS following reverse osmosis or other desalination processes. MBD-10 LTOC can be separated into its components, CG8-H-BL and SBG1-OH, for regeneration, and reused hundreds or thousands of times. The cation component, CG8-H-BL, is black in color and provides optimized color difference from SBG1-OH. This color difference is very helpful to verify resin separation during backwash.

CATRIDGE USE

ResinTech MBD-10 LTOC premixed mixed bed is ideal for single use cartridge applications where the longest possible throughput capacity is desired. The ratio of anion to cation resin is optimized to provide balanced exchange of both cations and anions as well as to maximize throughput life.

HIGH TEMPERATURE USE

ResinTech MBD-10 LTOC can be used at temperatures up to approximately 180 °F and will still provide reasonable life in single use applications. The anion component is one of the most thermally stable strong base anion resin commercially available and allows operation well above the temperature limits specified for most anion resins.



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://www.resintech.com)

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