MBD-15-LTOC

Grade: Low TOC

Mixed bed resin, styrene/DVB gel, low TOC grade, hydrogen & hydroxide form

ResinTech MBD-15-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-15-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)

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% ($Na^+/Cl^- \rightarrow H^+/OH^-$)
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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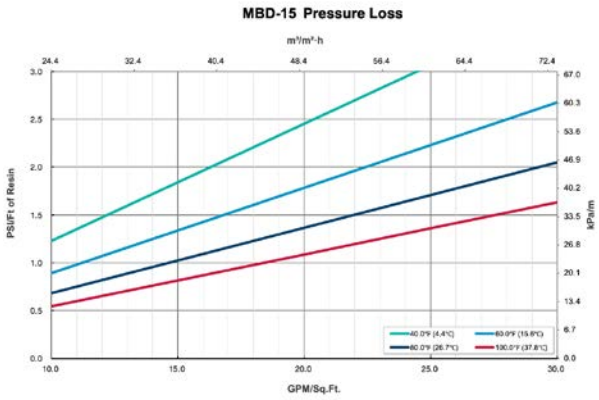
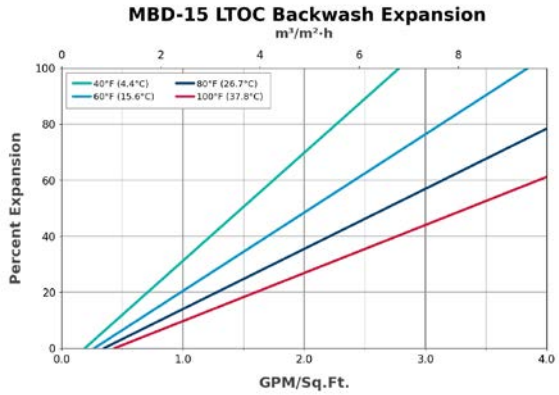
PRESSURE LOSS



The graph above shows the expected pressure loss of ResinTech MBD-15-LTOC 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-LTOC as a function of flow rate at various temperatures.

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, a dark-colored hydrogen form cation resin and a hydroxide form type 1 strong base anion resin, for regeneration, and reused hundreds or thousands of times. The cation component is black in color and provides optimized color difference from the anion. This color difference is very helpful to verify resin separation during backwash.

CARTRIDGE 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.

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)

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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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