MBD-15-SC

Grade: Semiconductor

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

ResinTech MBD-15-SC 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 SC grade means it has been functionally tested to produce >18 megohm resistivity and under 50 ppb of TOC. MBD-15-SC is intended for use in polishing mixed bed deionization applications that require high resistivity and very low TOC.

FEATURES & BENEFITS

- High Purity 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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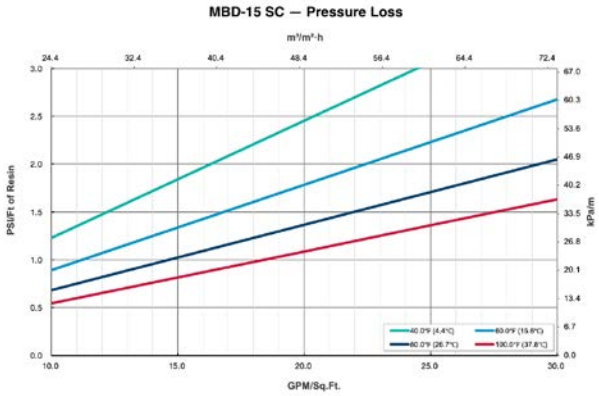
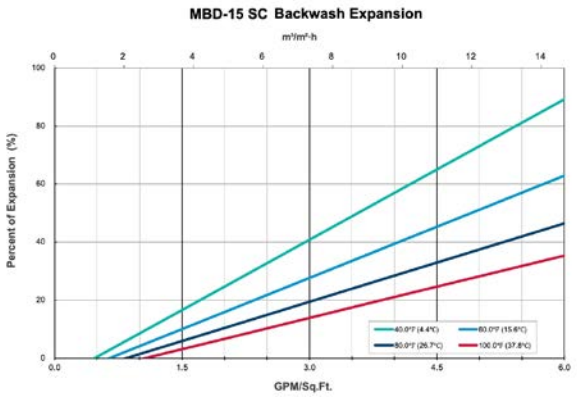
PRESSURE LOSS



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

IN PLACE REGENERATION

ResinTech MBD-15 SC is ideal for in-place regenerated mixed beds, especially if they are set up for the 60/40 anion to cation ratio that is optimum for most mixed bed polishers. The cation component has optimized bead size to separate cleanly from the anion component.

PORTABLE EXCHANGE DEIONIZATION (PEDI)

ResinTech MBD-15 SC 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. The mixed resin can be separated into its components for regeneration and reused hundreds or thousands of times. The cation component is dark in color and provides optimized color difference from the anion. This color difference is very helpful to verify resin separation during backwash.

EVERY LOT CERTIFIED

Every lot of MBD-15 SC is tested to verify capacity under load, ability to rinse above 18 megohms and to rinse down below 50 ppb of TOC. Lot certification is available upon request.

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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