MBD-25-MP

Macroporous mixed bed resin, hydrogen & hydroxide form

ResinTech MBD-25-MP is a 2:5 ratio of SACMP-H (a tan-colored hydrogen form macroporous cation resin) and SBMP1-OH (a hydroxide form type 1 macroporous strong base anion resin). The highly crosslinked components provide the highest possible thermal, physical, and chemical stability. MBD-25-MP is intended for use in polishing mixed beds with operating conditions that punish other mixed bed resins.

FEATURES & BENEFITS

- Macroporous Structure
- Ease Of Separation
- Superior Thermal & Physical Stability
- Complies With US FDA Regulations

APPLICATIONS

- High Temperature Applications
- Radwaste

COMPONENT 1

Media & Volumetric %	70% SBMP1-OH
Media Category	Strong Base Anion
Polymer Type	Macroporous
Polymer Matrix	Styrene/DVB
Functional Group	Trimethylamine
Ionic Form	Hydroxide (OH^-)
Physical Form	Spherical Beads
Capacity	0.90
Moisture Retention (%)	64 to 73
Media Color	Tan to Brown

COMPONENT 2

Media & Volumetric %	30% SACMP-H
Media Category	Strong Acid Cation
Polymer Type	Macroporous
Polymer Matrix	Styrene/DVB
Functional Group	Sulfonic Acid
Ionic Form	Hydrogen (H^+)
Physical Form	Spherical Beads
Capacity	1.70
Moisture Retention (%)	50 to 60
Media Color	Tan

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	41 - 43 lbs/cu.ft. (657 - 689 g/L)

SUGGESTED OPERATING CONDITIONS

Maximum Temperature	180°F (82°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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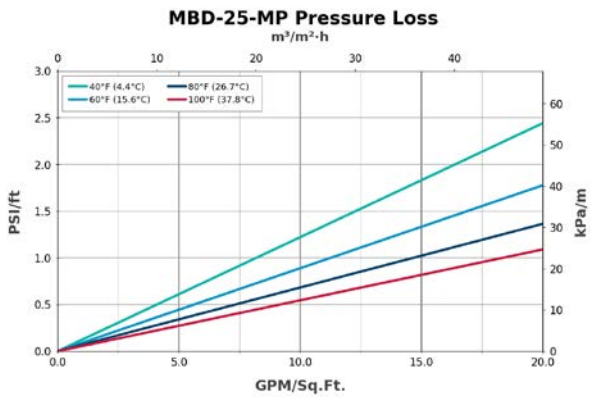
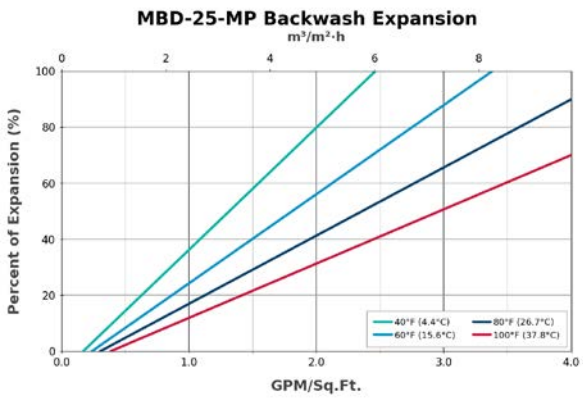
PRESSURE LOSS



The graph above shows the expected pressure loss of ResinTech MBD-25-MP 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-25-MP as a function of flow rate at various temperatures.

HIGH TEMPERATURE USE

ResinTech MBD-25 can be used at temperatures up to approximately 180℉ and will still provide reasonable life. Both components, SACMP-H and SBMP1-OH, are the most thermally stable resins commercially available and can operate well above the temperature limits specified for most other mixed bed resins.

RADWASTE

ResinTech MBD-25 uses macroporous high crosslinked resins (SACMP-H and SBMP1-OH) for both the cation and the anion components. The high crosslinking provides higher selectivity, more complete removal of radioactive and other contaminants, and also provides greater resistance to the effects of radiation. MBD-25 utilizes a unique anion-rich mixture (approximately 70% anion resin) to provide the longest possible throughput prior to carbon dioxide bleed through.

CERTIFICATIONS

REACH Registered

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

41 - 43 lbs/cu.ft. (657 - 689 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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