

MB-1 Mixed Bed Resin

MB-1 is a highly regenerated mixed bed of a Type 1 strong base , gelation exchange resin and a strong acid sulfonated polystyrene cation exchange resin, designed to provide ultra -high purity water. The special blend of Type 1 anion exchange

resins with nuclear grade cation exchange resins ensure high resistance, low TOC extra ctables and excellent regenerable capacities for inorganic versus organic ions .MB-1 is provided in a 60:40 anion to cation ratio (by volume).

Physical Chemical Properties

Polymer Structure :	
Cation	Hydrogen form sulfonated polystyrene copolymer
Anion	Hydroxyl form strong base alkyl quaternary ammonium polystyrene copolymer
Ionic Form a s Shipped:	Hydrogen/Hydroxide
Physical Form:	Spherical beads
Particle Size Distribution:	
16mesh (U.S . S td.)	
40mesh	
pH Range :	
Moisture Content	2% maximum
Conversion to ionic Form:	2% maximum
Cation - Hydrogen	0 to 14
Anion - Hydroxide	60% maximum
Chloride (Cl ⁻)	
Carbonate (CO ₃ ⁻²)	99% minimum
Sulfate (S O ₄)	93% minimum
Shipping Weight:	0.5% maximum
Total Capacity:	2% maximum
Cation (Na + form)	0.1% maximum
Anion (Cl ⁻ form)	43 lbs per cubic foot
	1.9 me q/ml min.
	1.3 me q/ml min.

Recommended Operating Conditions

Effluent Quality	Resins hould provide e ffluent quality of 10-15 megohm but is depe ndent on many factors
Maximum Temperature :	
Regenerable	60°C

MB-1 Features

Very Low Metal Content	
Special manufacturing conditions ensure very low metal content.	
Elemental analysis, dry basis	
Iron (Fe)	<100 ppm
Copper (Cu)	<50 ppm
Lead (Pb)	<50 ppm
Very Low TOC	
Non solvent sulfonation and special manufacturing processes assure very low TOC leakage.	
Uniform Particle Size	
98% of all beads are in the minus 16 to plus 40 mesh range: giving a lower pressure drop while maintaining the superior kinetics of standard mesh size products.	
Superior Physical Stability	
90% plus sphericity and high crush strengths together with a very uniform particle size provide greater resistance to bead breakage while maintaining low pressure drop.	

Safety Information

Caution: Acidic and basic regenerant solutions are corrosive and should be handled in a manner that will prevent eye and skin contact. Before
Non-regenerable 100°C
Slow Rinse (Displacement) Flow Rate: 2 to 10 US GPM per cubic foot

using strong oxidizing agents in contact with ion exchange resin, consult sources knowledgeable in the handling of these materials.

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 such actions .