



Purolite® MB46 Mixed Bed Resin

Purolite MB46 is a special high quality resin mixture for direct purification of water. The ratio of component resins has been specifically tailored to provide a high capacity for cations removal. It is therefore recommended where waters which contain bicarbonate, carbonate or even hydroxide ions are being treated, or where the limiting factor in performance could be kinetics of the cation resin. Waters which contain traces of iron or other metal corrosion contamination also benefit from treatment using this resin mixture. Purolite MB46 is suitable for use in regenerable or nonregenerable cartridges and in large ion exchange units. Passage of water at recommended flow rates through the resin as supplied can achieve almost complete reduction of total dissolved solids during the operation cycle. The residuals produce average conductivity values of less than 2 μS/cm for a major portion of the service run which may be extended depending upon the final water quality acceptable. Almost equivalent volumes of pure water of identical quality may be obtained after regeneration but only if sufficient regenerant quantities are employed to achieve the percentage conversion levels equivalent to those of the "as supplied" resin. Generally acceptable capacity and quality is obtained economically at lower regeneration levels.

TYPICAL PHYSICAL AND CHEMICAL CHARACTERISTICS

BASIC FEATURES:

Application	Demineralization - Electrical Discharge Machining (EDM)	
Polymer Structure	Gel polystyrene crosslinked with divinylbenzene	
Appearance	Spherical beads	
Functional Group	Sulfonic Acid and Type 1 Quaternary Ammonium	
Ionic Form as Shipped	H+ / OH-	

PRODUCT INFORMATION:

	Cation	Anion
Component	Gel strong acid cation	Gel type 1 strong base anion
Cation / Anion Volumetric Ratio	50 %	50 %
Moisture Content	60 % (max)	
Particle Size Range	300 - 1200 μm	
Uniformity Coefficient (max.)	1.7	
<300 μm (max.)	1 %	
Temp Limit, Non-Regenerable Bed	100°C (212°F)	
Temp Limit, Regenerable Bed	60°C (140°F)	
Shipping Weight (approx.)	720 - 750 g/l (45.0 - 46.9 lb/ft ₃)	

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