

## Ion Exchange Resin MR120

### Mixed Bed Resin-Nuclear Grade

MR120 nuclear-grade polishing mixed bed resin is used for the production of ultra-pure water, ensuring that the treated water is of the highest possible purity. Manufactured from an anion and strong-base acid cation mix, MR120 resin ensures that the processed water is of highest quality.

The high-resistivity water produced by MR120 is suitable for many high-end applications and industries, including ultra-pure water production, radiation wastewater treatment, manufacture and purification of pharmaceutical products, semiconductors, and condensate polishing.

This nuclear-grade resin is processed under the most exacting specifications, being specially purified with high-percent conversions to its regenerated form and closely controlled particle sizes. All MR120 has over 95% whole perfect beads, creating a product with low differential pressure drops, increased stability, and reduced likelihood of breakdown, which delivers consistent product performance.

These attributes are essential for producing the highest achievable purity with minimal rinse water, making MR120 resin the best choice for critical water treatment applications.

### Advantages

- Aluminum foil vacuum packaging for long-lasting freshness.
- Easy installation & pouring, preventing pollution, preserving resin quality.
- Convenient 5L packs (approx. 3.6 kg) with 5 packs in a box (25L) for transport and filling.
- Durable packaging which reduces material waste and environmental impact.
- Precise usage calculation minimizes leftover waste.

### Target Market & Applications:

- School research laboratories and biochemical science experiments.
- Food, beverage, and drinking water industries.
- Water Applications in Pharmaceutical and Cosmetic Industries.
- Kidney dialysis water systems.
- High-tech wafer processing, electronics, and power engineering.
- Chemical and petrochemical plants.

### Suggested Operating Conditions

(Product may be operated successfully outside these conditions, but results may not be optimum)

Maximum operating temperature	60°C	(140°F)
Feed water temperature	15 to 25°C	(60 to 77°F)
Minimum bed depth	900 mm	(3 feet)
Service flow rate	20 to 40 BV*/h	
Recommended influent water quality		
• Inlet Resistivity	> 17 MΩ.cm	
• Inlet Silica	< 2 ppb	
• Inlet Total Organic Carbon	< 15 ppb	

\*1 BV (Bed Volume) = 1 m<sup>3</sup> solution per m<sup>3</sup> resin (1BV/h = 0.125 gpm/ft<sup>3</sup>)



5 Liters/one pack



5 pack/one case (25L)

### Specification

MR120 Mixed Bed Resin	
Moisture Content	49-55
Uniformity Coefficient	<1.7
Bulk Density (g/ml)	0.65-0.75
Particle Size Range (mm)	0.315-1.25
Operation Temperature (°C)	≤ 85
Ionic Form	H <sup>+</sup> OH <sup>-</sup>
Exchange Capacity (mol/L)	≥ 0.6