

## Ion Exchange Resin MR120 Mixed Bed Resin-Nuclear Grade

MR120 nuclear-grade mixed bed resin is ideal for ultra-pure water production, ensuring the highest water purity. Made from a strong-base anion and cation mix, it is processed to meet exacting standards, with over 95% perfect beads for low pressure drops and high stability.

MR120 delivers consistent performance, producing high-resistivity water for critical applications like radiation wastewater treatment, pharmaceutical purification, semiconductor manufacturing, and condensate polishing. Its efficient design minimizes rinse water use, making it a top choice for high-end water treatment needs.

### 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.

### Typical Properties

Physical Properties	Cation Resin	Anion Resin
Copolymer	Styrene-divinylbenzene	Styrene-divinylbenzene
Matrix	Gel	Gel
Type	Strong acidcation	Strong base anion, Type I
Functional Group	Sulfonicacid	Trimethylammonium
PhysicalForm	Dark amber, translucent, Spherical beads	Clear amber, translucent, Spherical beads
Volume Ratio	35%	65%



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

### Suggested Operating Conditions

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

Maximum operating temperature	5-85°C (41-185°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 M .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>)