

# Resinex™ MX-1

## Mixed bed ion exchange resin

**Resinex™ MX-1** is a ready-to-use regenerable mixed bed resin specially designed for the production of fully demineralised water. The product is made up of a 1:1 volumetric ratio of **Resinex™ K-8** and **Resinex™ A-4** to offer a very low conductivity in the outlet during operation. The high operating capacity offers an economic advantage and the type 1 functional group in the anionic compound guarantees a high purity, silica free water.

### Typical Properties

Type	Crosslinked polystyrene divinylbenzene
Form	gel-type, amber, spherical beads
Functional group	Sulfonic acid/Quaternary ammonium, Type 1
Whole bead count	95% min.
Ionic form, as shipped	H <sup>+</sup> /OH <sup>-</sup>
Bead size	0.42 - 1.25 mm
Uniformity coefficient	1.60 max.
Bulk density, as shipped	740 kg/m <sup>3</sup>
Water retention	45 - 55%
Operating capacity	Cation: 0.85 eq/l, Anion: 0.45 eq/l min.
Volume change regenerated -> exhausted	15% max.
Stability, pH	0 - 14

### Standard Design Conditions

Bed depth	> 600 mm
Service flow rate	8 - 40 BV/h

### Key Features and Benefits

- **High Integrity Beads**  
Excellent resistance to mechanical degradation ensures low pressure drop
- **High Operating Capacity**  
Economical advantage
- **Low Conductivity Leakage**  
Offers conductivity leakage <0.1 µS/cm and it is usable for all standard mixed bed applications.

### Typical Applications

- Polishing after demineralisation
- Demineralisation in laboratories
- Mixed bed cartridges

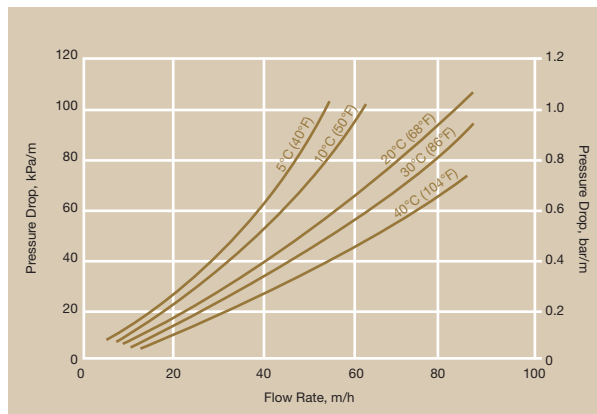
### Standard Packaging

- 25 lit. PE valve bag
- 1000 litre big bag

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### Pressure Drop



### Standard Regeneration Parameters

	HCL	NaOH
Concentration	4-6% HCl	3-5% NaOH
Level approx.	100 g/l	100 g/l
Linear velocity regenerant	5 m/h	5 m/h
Contact time regenerant	30-60 min.	30-60 min.
Linear velocity rinse approx.	8 m/h	8 m/h
Wash water requirement	8-10 BV	8-10 BV

### Product Packing



25 lit. polyethylene bag  
42 bags per pallet



Polypropylene FIBCs  
(big bag), 1.000 lit.



**CAUTION** Strong oxidizing agents such as nitric acid can react violently with ion exchange resins and cause explosive type reactions. Before using strong oxidants, consult sources knowledgeable in the handling of these materials.



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