

# Resinex™ K-8

## Strong acid cation exchange resin

**Resinex™ K-8** is a strongly acidic gel-type cation exchange resin. The crosslinked, polystyrene divinylbenzene matrix provides excellent resistance to physical breakdown. The high capacity achieved in demineralisation makes it suitable for most standard industrial water treatment applications. Together with optimisation of regenerant consumption, **Resinex™ K-8** will allow you to obtain a high quality process water in economical manner. **Resinex™ K-8** is available in different particle sizes specially adapted to counter-current and mixed bed applications.

### Typical Properties

Type	Crosslinked polystyrene divinylbenzene
Form	Gel-type, amber, spherical beads
Functional group	Sulfonic acid
Whole bead count	95% min.
Ionic form, as shipped	Na <sup>+</sup>
Bead size	16x40 US mesh (0.42-1.25 mm)
Effective size	0.45 - 0.55 mm
Bulk density	820 kg/m <sup>3</sup>
Real density	1.28 g/cm <sup>3</sup>
Water retention	45-48%
Total capacity	2.00 eq/l min.
Volume change Na <sup>+</sup> → H <sup>+</sup>	8% max.
Stability, temperature	120°C max.
Stability, pH	0-14

### Standard Design Conditions

Bed depth	>700 mm
Service flow rate	8-40 l/h/l
Backwash expansion	50-75%

### Key Features and Benefits

- **European AP97(1) Approved**  
Meets European Council Resolution AP97(1) for use of ion exchange resins in the processing of food products
- **WRAS BS 6920 Approved**  
BS 6920 for cold water and hot water up to 85°C
- **High Integrity Beads**  
Excellent resistance to mechanical degradation ensures low pressure drop
- **Extended Operating Capacity**  
Economical advantage
- **Optimized for Counter-Current Flow**  
Compatible with all modern systems
- **Very High Total Capacity**

### Typical Applications

- Industrial softening
- Demineralisation and polishing when used in combination with Resinex™ A-4

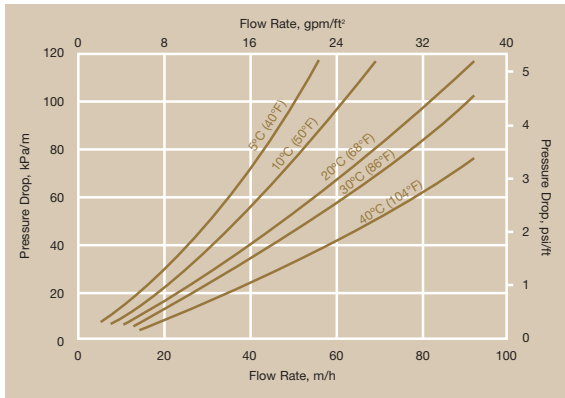
### Standard Packaging

- 25 lit. PE valve bags
- 1000 lit. big bags

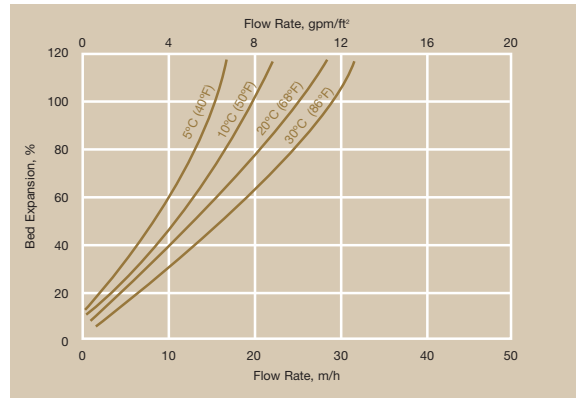
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### Pressure Drop



### Backwash Expansion



### Standard Regeneration Parameters for Softening

Regeneration	Co-Flow	Counter-Flow
Concentration	10% NaCl	10% NaCl
Level	80-300 g/l	50-150 g/l
Flow rate regeneration	4-6 BV/h	5-8 BV/h
Contact time regeneration	30-60 min.	20-40 min.
Flow rate rinse	5-20 BV/h	5-20 BV/h
Rinse water required	8-15 BV	3-6 BV

### Standard Regeneration Parameters for Demineralisation

Regeneration	Co-Flow	Counter-Flow
Concentration	8% HCl	5% HCl
Level	60-150 g/l	45-70 g/l
Flow rate regenerant	4-6 BV/h	5-8 BV/h
Contact time regeneration	30-60 min.	20-40 min.
Flow rate slow rinse	5-20 BV/h	5-20 BV/h
Slow rinse water required	8-15 BV	3-6 BV
Flow rate fast rinse	20-40 BV/h	20-40 BV/h
Fast rinse water required	8-15 BV	3-6 BV

### Product Packaging



25 lit. polyethylene valve bags,  
48 bags per pallet



Polypropylene FIBCs  
(big bags), 1000 lit.



**NOTICE** Jacobi Carbons reserves the right to change product specifications without prior notification. The information contained in this datasheet is intended to assist a customer in the evaluation and selection of products supplied by Jacobi Carbons. The customer is responsible for determining whether products and the information contained in this document are appropriate for the customer's use. Jacobi Carbons assumes no obligation or liability for the usage of the information in this datasheet, no guarantees or warranties, expressed or implied, are provided. Jacobi Carbons disclaims responsibility and the user must accept full responsibility for performance of systems based on this data.  
**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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