

# Resinex™ K-8 H

## Strong acid cation resin

**Resinex™ K-8 H** 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 the optimisation of regenerant consumption, **Resinex™ K-8 H** will allow you to obtain a high quality process water in economical manner.

The selected bead distribution is especially adapted for all modern systems (UPCORE, Schwebebett,...).

### 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	H <sup>+</sup>
Bead size	0.42 - 1.25 mm
Uniformity coefficient	1.60 max.
Bulk density, as shipped	780 kg/m <sup>3</sup>
Real density	1.21 g/cm <sup>3</sup>
Water retention	45 - 48%
Total capacity (H <sup>+</sup> form)	1.80 eq/l min.
Volume change H <sup>+</sup> → Na <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 BV/h
Backwash expansion	50 - 75%

### Key Features and Benefits

- **High Integrity Beads**  
Excellent resistance to mechanical degradation ensures low pressure drop
- **Extended Operating Capacity**  
Economical advantage
- **European ResAP (2004) 3 Approved**  
Meets European Council Resolution AP (2004) 3 for use of ion exchange resins in processing of food products.
- **WRAS BS 6920 Approved**  
BS 6920 for cold water and hot water up to 85°C
- **Selected Bead Size**  
Lower pressure drop

### Typical Applications

- Decationisation
- Demineralisation in industrial water treatment systems together with **Resinex™ A-4**
- Polishing Mixed-bed systems together with **Resinex™ A-4**

### Standard Packaging

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



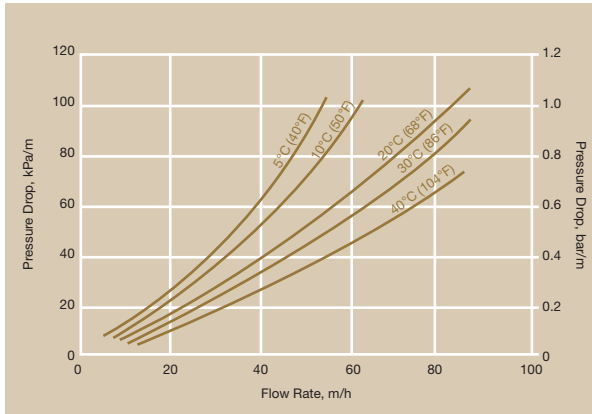
This product has been tested and certified to NSF/ANSI Standard 44 for materials safety only.

A minimum flow of 0.39 gpm per cubic foot of media is required.

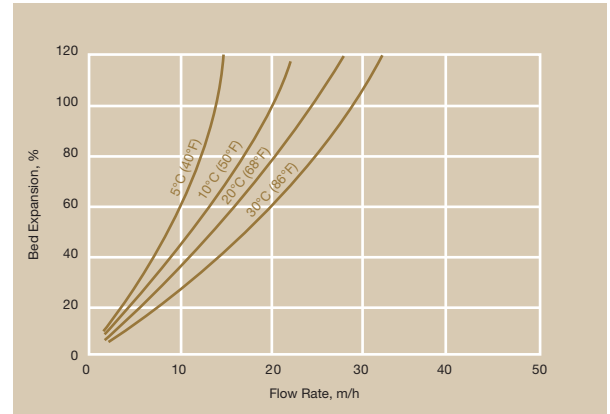
# Resinex™ K-8 H

Strong acid cation resin

## 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 Packing



25 lit. polyethylene valve bag  
48 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.



**NOTICE** Due to the progressive nature of the Jacobi Carbons Group and the continually improving design and performance of our products, we reserve 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 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.

© Copyright 2012 Jacobi Carbons, Resinex, the Resinex and the Jacobi logos are trademarks of Jacobi Carbons, all of which may or may not be used in certain jurisdictions.

RXK8H\_e\_Rev12\_20131127

**LENNTECH**

info@lenntech.com Tel. +31-152-610-900  
www.lenntech.com Fax. +31-152-616-289

**JACOBI**  
THE CARBON COMPANY