

# Resinex™ KWP

## Strong acid cation exchange resin

**Resinex™ KWP** is a high purity, premium grade, strongly acid macroporous-type cation exchange resin. The macroporous crosslinked matrix offers a very high resistance to osmotic shock, attrition and organic fouling. Its remarkable physical stability makes it suitable for industrial applications at very high velocity such as treatment of condensate.

The selected bead distribution of **Resinex™ KWP** is especially adapted for all modern counter-current systems (i.e. Schwebebett, UPCORE,..) and mixed bed systems.

### Typical Properties

Type	Crosslinked polystyrene divinylbenzene
Form	macroporous, opaque, spherical beads
Functional group	Sulfonic acid
Whole bead count	95% min.
Ionic form, as shipped	Na <sup>+</sup>
Bead size	0.42 - 1.25 mm
Uniformity coefficient	1.60 max.
Bulk density, as shipped	790 kg/m <sup>3</sup>
Real density	1.27 g/cm <sup>3</sup>
Water retention	45 - 55%
Total capacity (Na <sup>+</sup> form)	1.80 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 BV/h
Backwash expansion	50 - 75%

### Key Features and Benefits

- **High Integrity Beads**  
Excellent resistance to mechanical degradation ensures low pressure drop
- **Excellent Resistance To Organic Fouling**  
Removable organics
- **High Resistance To Osmotic Shock**  
Extended lifetime and very low number of broken beads
- **Very High Total Capacity**  
Economical advantage
- **Special Bead Size**  
Lower pressure drop

### Typical Applications

- Decationisation in industrial water treatment, especially in presence of high organic loadings
- Demineralisation and polishing when used in combination with **Resinex™ AP**

### Standard Packaging

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



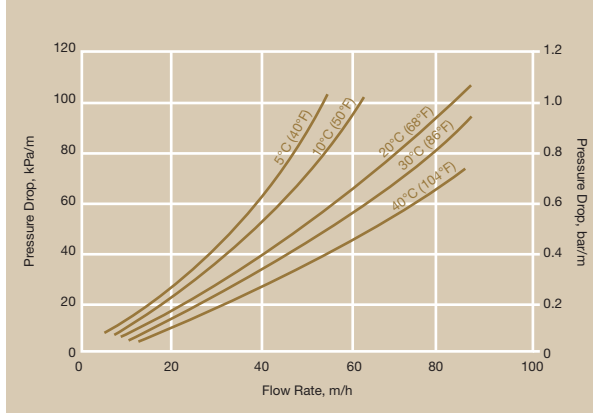
This product has been tested and certified to NSF/ANSI Standard 44 for materials safety only.

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

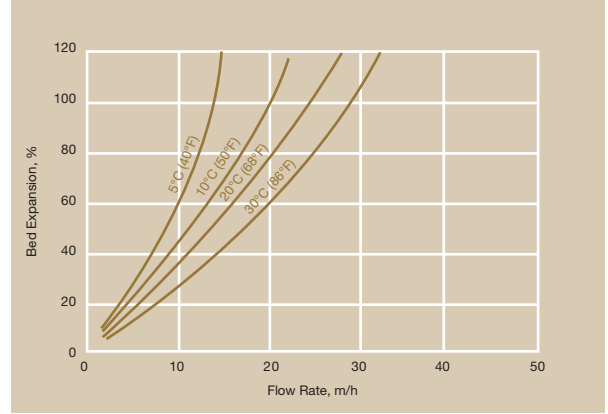
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### Pressure Drop



### Backwash Expansion



### Standard Regeneration Parameters

### Co-Flow

### Counter-Flow

Concentration	5% HCl	5% HCl
Level	60-120 g/l	50-80 g/l
Flow rate regenerant	4-6 BV/h	6-8 BV/h
Contact time regenerant	30-60 min.	20-40 min.
Flow rate slow rinse	4-6 BV/h	6-8 BV/h
Slow rinse water required	2-4 BV	2 BV
Flow rate fast rinse	10-30 BV/h	10-30 BV/h
Fast rinse water required	6-10 BV	6-10 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.

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