

Resinex™ A-4

Strong base anion exchange resin

Resinex™ A-4 is a high purity, premium grade, strongly basic gel-type anion exchange resin type 1, specially designed for achieving low silica leakage in water demineralisation applications. The product is a bead type, crosslinked polystyrene-divinylbenzene copolymer resin that offers a good resistance to physical and mechanical breakage and organic fouling. **Resinex™ A-4** is available in different particles sizes specially adapted to counter-current and mixed-bed applications.

Typical Properties

Type	Crosslinked polystyrene divinylbenzene
Form	Gel-type, amber, spherical beads
Functional group	Quaternary Ammonium, Type 1
Whole bead count	95% min.
Ionic form, as shipped	Cl ⁻
Bead size	16x40 US mesh (0.42-1.25 mm)
Effective size	0.45 ± 0.07 mm
Bulk density	670 kg/m ³
Real density	1.06 g/cm ³
Water retention	50-56%
Total capacity	1.30 eq/l
Volume change Cl ⁻ → OH ⁻	30% max.
Stability, temperature	40°C max. in OH ⁻ form
Stability, pH	0-14

Standard Design Conditions

Bed depth	>750 mm
Service flow rate	8-40 l/h/l
Backwash expansion	50-75%

Key Features and Benefits

- **High Integrity Beads**
Excellent resistance to mechanical degradation ensures low pressure drop
- **Low Silica Leakage**
- **Optimized Caustic Soda Consumption**
Economical advantage

Typical Applications

- Demineralisation when used in combination with Resinex™ K-8
- Polishing mixed bed when used in combination with Resinex™ K-8

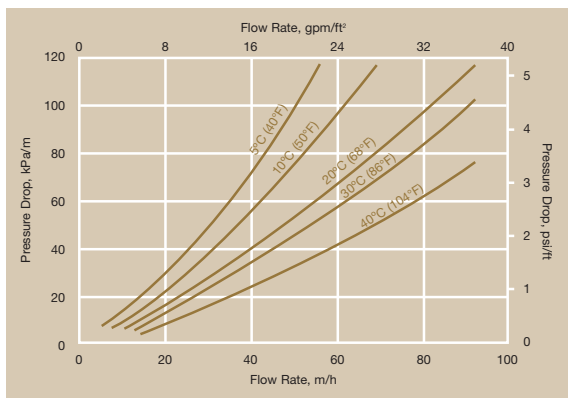
Standard Packaging

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

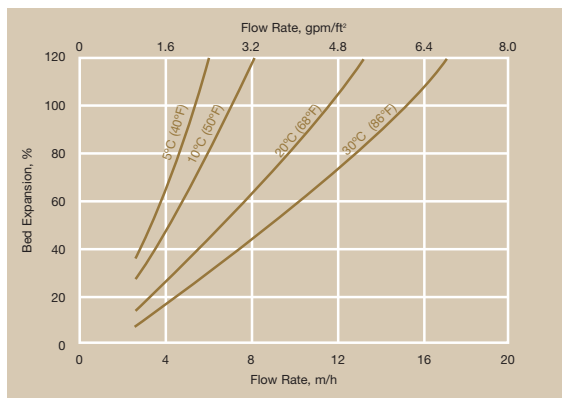
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Pressure Drop



Backwash Expansion



Standard Regeneration Parameters

Co-Flow

Counter-Flow

Concentration	4% NaOH	2% NaOH
Level	70-100g	50-80 g/l
Flow rate regenerant	4-6 BV/h	6-8 BV/h
Contact time regeneration	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

The use of a weak base solution such as ammonia or sodium carbonate as a regenerant is an alternative to sodium hydroxide. Please contact your nearest Jacobi sales office for further information.

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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