Resinex™
Ion Exchange Resin

Resinex™ AB-1 UB

Weak base anion exchange resin

Resinex™ AB-1 UB is a high purity, premium grade, weakly basic macroporous anion exchange resin that is highly resistant to osmotic shock. The product has the ability to adsorb reversibly organic molecules and therefore protects strong base anion exchange resins such as Resinex™ A-4 UB which follows Resinex™ AB-1 UB in serials systems. Thanks to the high regeneration efficiency being close to the stoichiometric ratio, Resinex™ AB-1 UB reduces the ionic load in multiple bed systems.
The selected bead distribution - very close to monodisperse - 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, milky white, spherical beads
Functional group	Tertiary amine
Whole bead count	95% min.
Ionic form, as shipped	Free base/Cl^-
Bead size	(≥ 90%) 0.50 - 0.71 mm
Uniformity coefficient	1.20 max.
Bulk density, as shipped	680 kg/m^3
Real density	1.05 g/cm^3
Water retention	50 - 58%
Total capacity	1.40 eq/l min.
Volume change FB –> Cl^-	20% max.
Stability, temperature	75°C max. in free base form
Stability, pH	0 - 14

Standard Design Conditions

Bed depth	> 750 mm
Service flow rate	8 - 55 BV/h
Backwash expansion	50 - 75%

Key Features and Benefits

- **High Integrity Beads**
  Excellent resistance to mechanical degradation ensures low pressure drop
- **Easily Regenerable**
- **Very Low Caustic Soda Consumption**
  Economical advantage
- **High Resistance To Osmotic Shock**
  Extended lifetime and very low number of broken beads
- **Uniform Bead Size**
  Lower pressure drop and regenerant consumption
- **Perfect Separation**
  Suitable for Mixed-bed applications

Typical Applications

- Demineralisation in industrial water treatment systems together with Resinex™ K-8 UB and Resinex™ A-4 UB

Standard Packaging

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

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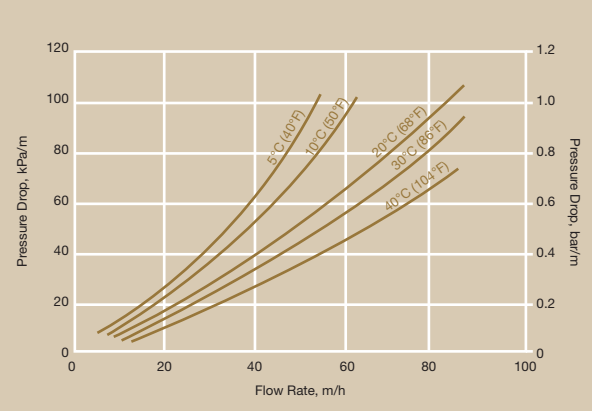
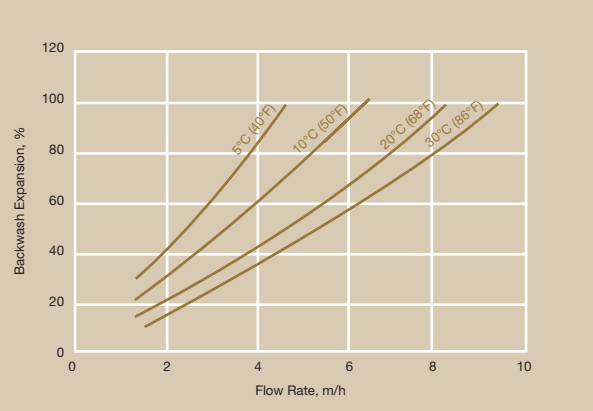
Pressure Drop



Backwash Expansion



Standard Regeneration Parameters	Co-Flow	Counter-Flow
Concentration	3-5% NaOH	2-4% NaOH
Level	75-90 g/l	45-60 g/l
Flow rate regenerant	4-6 BV/h	6-8 BV/h
Contact time regenerant	30-50 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 caustic soda. Please contact your nearest Jacobi Carbons sales office for further information.

Product Packing

25 lit. polyethylene valve 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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