Resinex™
Ion Exchange Resin

Resinex™ NR-1

Nitrate removal from potable water

Resinex™ NR-1 is a high purity, premium grade, strongly basic macroporous-type anion exchange resin, specially developed for selective nitrate removal from potable water in presence of high levels of sulphate. Resinex™ NR-1 offers a superior operating capacity and an excellent selectivity to nitrate for economical treatment in co-flow and counter-flow systems.

Typical Properties

Type	Crosslinked polystyrene divinylbenzene
Form	macroporous, milky white, spherical beads
Functional group	Quarternary Ammonium
Whole bead count	95% min.
Ionic form, as shipped	Cl^-
Bead size	(≥ 95%) 0.40 - 1.25 mm
Uniformity coefficient	1.60 max.
Bulk density, as shipped	700 kg/m^3
Real density	1.07 g/cm^3
Water retention	50 - 60%
Total capacity (Cl^- form)	0.80 eq/l min.
Stability, temperature	100°C (Cl^- Form) max.
Stability, pH	0 - 14

Standard Design Conditions

Bed depth	> 750 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
- **High Selectivity To Nitrate**
  To comply with local legislation
- **High Operating Capacity**
  Economical advantage
- **Pretreated - Direct Usage In Cartridges**
  Point-of-entry and Point-of-use
- **WRAS BS 6920 Approved**
  BS 6920 for cold water

Typical Applications

- Nitrate removal from drinking water

Standard Packaging

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

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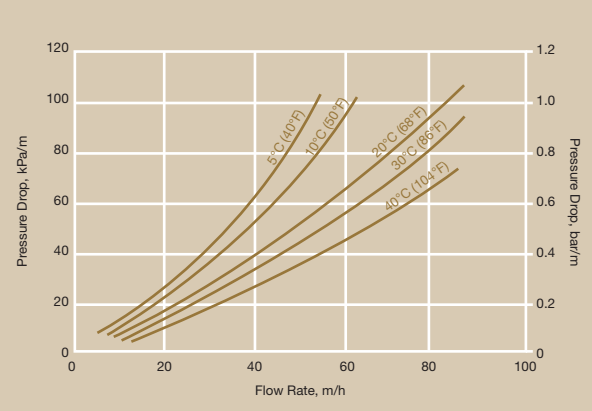
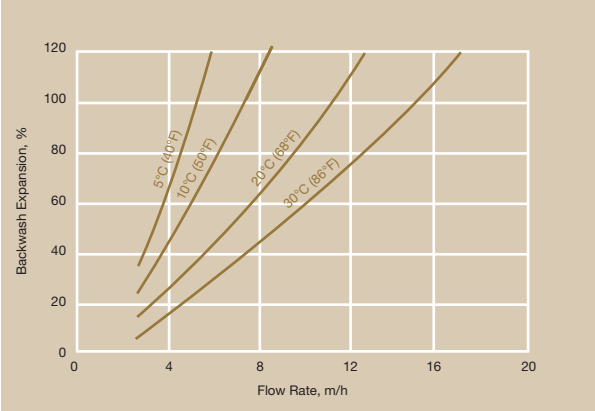
Pressure Drop



Backwash Expansion



Standard Regeneration Parameters

Regeneration	Co-Flow
Concentration	5-10% NaCl
Level	150-200 g/l
Flow rate regenerant	4-6 BV/h
Contact time regenerant	30-60 min.
Flow rate rinse	2-6 BV/h
Rinse water required	2 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.

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