

PRODUCT SPECIFICATION SHEET

SIR-100-HP

SELECTIVE EXCHANGER

NITRATE SELECTIVE
POLYSTYRENIC MACROPOROUS
CHLORIDE FORM

ResinTech SIR-100-HP is a chloride form macroporous nitrate selective strong base anion resin. It has been Gold Seal Certified by the WQA for use with potable water. Its unique functionality increases the selectivity for nitrate and decreases selectivity for sulfate, often resulting in higher operating capacity and lower leakage than type 1 or type 2 anion resins. SIR-100-HP is intended for the removal of nitrate and/or perchlorate from otherwise potable water.

APPLICATIONS

- Nitrate Removal
- Perchlorate Removal



TYPICAL PROPERTIES & PHYSICAL CHARACTERISTICS

Polymer Matrix	Styrenic Macroporous
Ionic Form	Chloride
Functional Group	Triethylamine
Physical Form	Spherical Beads
Particle Size	16 to 50 US Mesh (297 - 1190 μ m)
% < 50 mesh (300μm)	< 1%
Minimum Sphericity	95%
Uniformity Coefficient	1.6
Reversible Swelling	Cl to No ₃ -5% to -10%
Temp Limit	250°F (121°C)
Capacity (meq/mL)	1.0
Moisture Retention	46% to 65%
Shipping Weight	40 - 42 lbs/ft ³ (641 - 673 g/L)
Color	White to Tan
Regenerability	Yes

CERTIFICATIONS

WQA Gold Seal*

PACKAGING OPTIONS

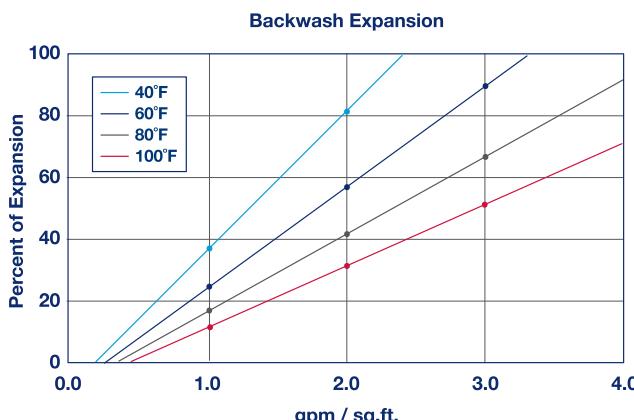
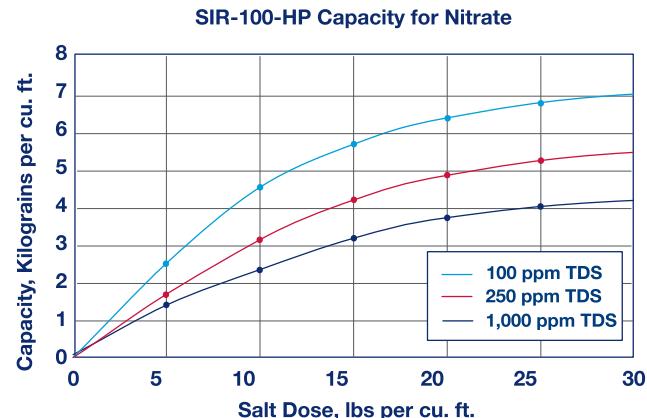
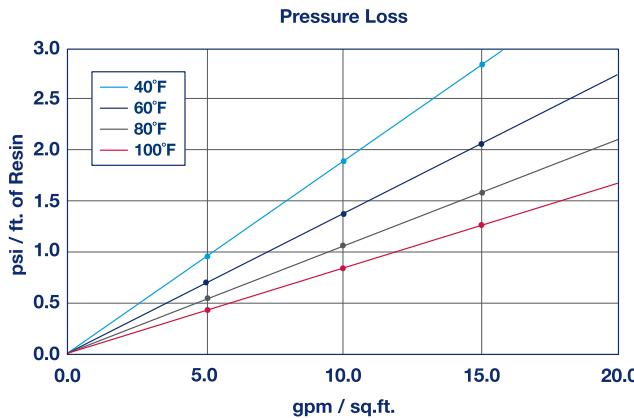
- 500 ml samples
- 1 ft³ drums
- 1 ft³ bags
- 1 ft³ boxes
- 7 ft³ drums
- 42 ft³ supersacks

* NSF/ANSI/CAN 61: Drinking Water System Components - Health Effects

SIR-100-HP

HYBRID

NITRATE SELECTIVE
POLYSTYRENIC MACROPOROUS
CHLORIDE FORM

**NITRATE REMOVAL**

ResinTech SIR-100-HP is used in the chloride form to remove nitrates from potable water. It has a unique amine functional group that eliminates the possibility of nitrate dumping. SIR-100-HP has reduced affinity for sulfate which provides high operating capacity and efficient regeneration. When treating waters with high hardness the brine dilution and displacement waters should be softened and a low hardness salt used to prevent scaling.

SUGGESTED OPERATING CONDITIONS

Maximum continuous temperature	170°F
Chloride form	24 inches
Minimum bed depth	25 to 50 percent
Backwash expansion	20 psi
Maximum pressure loss	4 to 10 SU
Operating pH range	5 to 10 percent NaCl
Regenerant Concentration	>10 lbs/cu.ft.
Salt cycle	0.25 to 1.0 gpm/cu.ft.
Regenerant level	>30 minutes
Regenerant flow rate	Same as dilution flow
Regenerant contact time	10 to 15 gallons/cu.ft.
Displacement flow rate	Same as service flow
Displacement volume	35 to 60 gallons/cu.ft.
Rinse flow rate	1 to 4 gpm/cu.ft.
Rinse volume	<10 gpm/cu.ft.
Service flow rate	
Average flow	
Peak Flow	

Note: These guidelines describe average low risk operating conditions. They are not intended to be absolute minimums or maximums.
For operation outside these guidelines, contact ResinTech Technical Support