United States Resin Company

P.O. Box 31219
Phoenix, Az. 85046

A-S1MN Cl

STRONG BASE ANION NITRATE SELECTIVE ION EXCHANGE RESIN

(Designed for use in highly selective nitrate removal applications)

SUGGESTED OPERATING CONDITIONS

Maximum Temperature	
Salt form	60C
Minimum Bed Depth	600 mm
Backwash Rate	50 to 75% Bed Expansion
Regenerant Concentration	5 to 8 percent
Regenerant Flow Rate	3-m/h
Regenerant Contact Time	At least 30 Minutes
Regenerant Level	80 to 140 gNaCl/g-resin.
Displacement Rinse Rate	Same as Regenerant Flow Rate
Displacement Rinse Volume	Approximatety 2 BV.
Fast Rinse Rate	Same as Service Flow Rate
Fast Rinse Volume	5 to 8 BV.
Service Flow Rate	30 to 60 BV.

*1 BV: (Bed Voume)

The Sodium cycle operating capacity of United States Resin C-8 for hardness removal at various regeneration levels with an influent calcium/magnesium ratio of 2/1 and a hardness level of 500 ppm, as CaCO3, is shown in the following table:

Pounds of NaCl/cu.ft.	Capacity Kilograins/cu.ft. 500ppm as $CaCO_3$ Water Analyses: Cl^-/HCO_3 =1:1 NO_3 = 100ppm as $CaCO_3$ Percent sulfate			
	0	25	50	75
5	8.2	7.0	6.6	6.5
10	10.0	8.5	8.1	7.9
15	10.8	9.2	8.7	8.6
20	11.3	9.6	9.1	8.9