



## 001x10 Styrene Series Gel Strong Acid Cation Resin

### 1. Description

001x10 is a premium high purity grade of conventional gel poly(styrene sulfonate) cation-exchange resin, Its chemical and physical stability, particularly its resistance to oxidation, The higher density spheres of the graded cation resin ensures good backwash separation at the recommended flow rates.

This product is analogous to :Amberlite IR-122,Dowex HGR-W2/C10, Purolite C100X10 , Diaion SK110

### 2. Typical Physical and Chemical Properties:

Items	Specification
Polymer Matrix Structure	Crosslinked Polystyrene Divinylbenzene
Physical Form and Appearance	Golden yellow color Spherical beads
Functional Groups	R-SO <sub>3</sub> <sup>-</sup>
Ionic Form ,as shipped	Na <sup>+</sup>
Total Capacity, Na <sup>+</sup> form, wet, volumetric	≥2.1eq/l min
Moisture Retention, Na <sup>+</sup> form	40-46%
Particle Size Range	0.3mm-0.6mm
<0.5mm (max.)	1%
Uniformity Coefficient (max.)	1.6
effective size	0.4-0.7mm
Reversible Swelling	Na <sup>+</sup> → H <sup>+</sup> (max.)
	3-5%
Shipping Weight (approx.)	820 -920g/l
Specific Gravity, moist Na <sup>+</sup> Form	1.31
pH Range, Stability	0 - 14

### 3. Suggested Operating Condition

Maximum Temperature	Na <sup>+</sup> Form	140°C (285oF) max.
	H <sup>+</sup> Form	120°C (248oF) max.
Backwash Rate		25 to 50% Bed Expansion
Regenerant Concentration	Hydrogen Cycle	3% HCl or 2 to 3% H <sub>2</sub> SO <sub>4</sub>
	Sodium Cycle	6% to 8% NaCl or 3% NaOH
Regenerant dosage	HC1 or H <sub>2</sub> SO <sub>4</sub>	HC1 or H <sub>2</sub> SO <sub>4</sub> volume:resin volume =3:1
	NaCl	NaCl volume:resin volume =2:1
	NaOH	NaOH volume:resin volume =3:1
Regenerant Flow Rate		2 to 4 BV/h
Regenerant contact Time		At least 40 minutes
Service Flow Rate		10-25m/h

### 4. Applications

This product is used in extracting of antibiotics,drug purification,water softening, preparation of pure water or high purity water and so on



Coastal Water Filters, Inc.  
435 23rd St NW  
Naples, FL 34120  
P: 239-398-0967

www.coastalwaterfilters.com  
info@coastalwaterfilters.com

