

001×8 Styrene Series Gel Strong Acid Cation Exchange Resin

1. Description

001×8 is a high purity premium grade ,high capacity, gelular, sulfonated, polystyrene cation resin supplied in the sodium or hydrogen form as moist, tough, uniform, spherical beads. 001×8 is intended for use in all water softening, dealkalization, deionization and chemical processing applications.

This product is analogous to :Amberlite IR-120 ,Dowex 50, KY2-8 , Diaion SK-IB

2. Typical Physical and Chemical Properties:

Items		Specification
Polymer Matrix Structure		Crosslinked Polystyrene Divinylbenzene
Physical Form and Appearance		yellow to brown spherical Particle
Functional Groups		R-SO3 ⁻
Ionic Form ,as shipped		Na+
Total Capacity, Na+ form, wet, volumetric		≥2.0 eq/l min
Moisture Retention, Na+ form		43-48%
Particle Size Range		0.3mm-1.2mm
<300 μm (max.)		1%
Uniformity Coefficient (max.)		1.6
effective size		0.4-0.7mm
Reversible Swelling	Na+ \rightarrow H+ (max.)	8%
Shipping Weight (approx.)		780 -880g/l
Specific Gravity, moist Na+ Form		1.29
Temperature Limit		120°C (250 °F)
pH Range, Stability		0 - 14

3.Suggested Operating Condition

Maximum Temperature	Na+ Form	120°C (248oF) max.
	H+ Form	100°C (212oF) max.
Backwash Rate		25 to 50% Bed Expansion
Regenerant Concentration	Hydrogen Cycle	3% HCl or 2 to 3% H2SO4
	Sodium Cycle	6% to 8% NaCl or 3% NaOH
	HC1 or H2SO4	HC1 or H2SO4 volume:resin volume =3:1
Regenerant dosage	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

It is used in water softening applications and Demineralization, good kinetic performance across a wide range of operating conditions while offering excellent chemical and physical stability







