

USF C-211 CATION RESIN

Description:

USF C-211 is an 8% cross-linked gel strong acid cation exchange resin consisting of a sulfonated polymer matrix of styrene and divinylbenzene supplied in the sodium form. This resin has a high exchange capacity and good chemical resistance over a wide pH range and is typically used in deionization and chemical processing applications.

Chemical Properties

Functional Group	Sulfonic Acid
Ionic Form (as shipped)	Sodium
Moisture Content	44 - 48% (Na form)
Exchange Capacity	2.0 meq / ml minimum (Na form)
Impurities	
Iron (Fe)	50 ppm maximum
Aluminum (Al)	50 ppm maximum
Copper (Cu)	50 ppm maximum
Heavy Metals (as Pb)	50 ppm maximum
Kinetics	> 15 megohm (Siemens Kinetics Test)

Physical Properties

Particle Screen Sizing	
+ 16 Mesh	5% maximum
- 50 Mesh	1% maximum
Friability Average	200 grams / bead minimum
Whole Beads (%)	90 minimum
Shipping Weight	52 lbs. / cu. ft.

Operating Conditions

Operating pH Range	1 to 14
Service Flow Rate	1 to 50 gpm / ft ²
Regenerant Flow Rate	
HCl	0.5 to 1.0 gpm / cu. ft.
H ₂ SO ₄	0.5 to 2.0 gpm / cu. ft.
Rinse Flow Rate	0.5 to 1.5 gpm / cu. ft.
Rinse Volume	40 to 75 gallons / cu. ft.
Maximum Operating Temperature	250°F