

USF C-211 SG (H) CATION RESIN

Description:

USF C-211 SG (H) is an 8% cross-linked gel strong acid cation exchange resin consisting of a sulfonated polymer matrix of styrene and divinylbenzene supplied in the hydrogen 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. USF C-211 SG H is specially processed to provide low TOC leachables and is analyzed kinetically to ensure it is capable of producing 17 megohm mixed bed deionized water.

Chemical Properties

Functional Group	Sulfonic Acid
Ionic Form (as shipped)	Hydrogen
Moisture Content	50 - 56% (H form)
Exchange Capacity	1.8 meq / ml minimum (H form)
Conversion to Hydrogen Form	99% minimum
Impurities	
Sodium (Na)	50 ppm maximum
Iron (Fe)	50 ppm maximum
Aluminum (Al)	50 ppm maximum
Copper (Cu)	50 ppm maximum
Heavy Metals (as Pb)	50 ppm maximum
TOC Leachables at 15 Bed Volumes	50 ppb maximum
Kinetics	> 17 megohm (Siemens Kinetics Test)

Physical Properties

Particle Screen Sizing	
+ 16 Mesh	5% maximum
- 50 Mesh	0.5% maximum
Friability Average	200 grams/bead minimum
Shipping Weight	50 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