

## USF NR-6 SG MIXED BED RESIN

### Description:

USF NR-6 SG is a 1:1 chemical equivalent of USF C-211 SG (H) and USF A-284 SG (OH). USF C-211 SG (H) is an 8% cross-linked gel strong acid cation exchange resin. USF A-284 SG (OH) is a Type I strong base gel anion resin. C-211 SG (H) and USF A-284 SG (OH) are specially processed to provide low TOC leachables and analyzed kinetically to ensure they are capable of producing 17 megohm mixed bed deionized water.

### Chemical Properties

Functional Groups	Sulfonic Acid, Trimethylamine
Ionic Form (as shipped)	Hydrogen / Hydroxide mix
Moisture Content	55% max. (H form cation) / 48% max. (Cl form anion)
Exchange Capacity	1.8 meq / ml min. (H form cation) / 1.2 meq / ml min. (OH form anion)
Conversion	
Cation	99% minimum (H form)
Anion	94% minimum (OH form)
Impurities	
Chloride (Cl)	0.5% maximum
Sulfate (SO <sub>4</sub> )	0.5% maximum
Carbonate (CO <sub>3</sub> )	5% maximum
Sodium (Na)	100 ppm maximum
Iron (Fe)	200 ppm maximum
Copper (Cu)	50 ppm maximum
Aluminum (Al)	50 ppm maximum
Heavy Metals (as Pb)	50 ppm maximum
TOC Leachables (15 bed volumes)	≤ 10 ppb maximum
Kinetics	> 17 megohm (Siemens Kinetics Test)

### Physical Properties

Particle Screen Sizing	
+ 16 Mesh	5% maximum
- 50 Mesh	0.5% maximum
Effective Size (Approximate)	0.40 - 0.60 mm
Whole Beads (%)	90 minimum
Shipping Weight	45 lbs. / cu. ft.

### Operating Conditions

Operating pH Range	1 to 14
Service Flow Rate	1 to 4 gpm / cu. ft.
Maximum Operating Temperature	140°F