

## USF C-381 SG (H) CATION RESIN

### Description:

USF C-361 SG (H) is a strong acid cation exchange resin consisting of a sulfonated polymer matrix of styrene and divinylbenzene supplied in the hydrogen form. This resin is macroporous with an opaque bead appearance and is more resistant to chemical attack when treating aggressive waters. This resin is analyzed kinetically to ensure the capability of producing 17 megohm mixed bed deionized water. This resin is specially processed to be low in TOC leachables.

### Chemical Properties

Functional Group	Sulfonic Acid
Ionic Form (as shipped)	Hydrogen
Moisture Content	49 to 56% (H form)
Exchange Capacity	1.7 meq / ml minimum (H form)
Kinetics	> 17 megohm (Siemens Kinetic Test)
16 Hour Soak TOC	< 5 ppm
Dynamic TOC	< 50 ppb @ 15 BV

### Physical Properties

Particle Screen Sizing	
+ 16 Mesh	5% maximum
- 50 Mesh	0.5% maximum
Effective Size (Approximate)	0.47 - 0.63 mm
Swelling	5% sodium to hydrogen form
Whole Beads (%)	95 minimum
Shipping Weight	48 lbs. / cu. ft.

### Operating Conditions

Operating pH Range	1 to 14
Service Flow Rate	1 to 4 gpm / cu. ft.
Regenerant Flow Rate	0.5 to 2.0 gpm / cu. ft.
Rinse Flow Rate	0.5 to 2.0 gpm / cu. ft.
Rinse Volume	25 to 50 gallons / cu. ft.
Maximum Operating Temperature	250°F