

## USF C-361 MEG (H) CATION RESIN

### Description:

USF C-361 MEG (H) is a 10% cross-linked gel strong acid cation exchange resin consisting of a sulfonated polymer matrix of styrene and divinylbenzene supplied in the hydrogen form. The resin has a high exchange capacity, excellent stability at elevated temperatures, and superior resistance to oxidizing agents. It has been specially processed to provide high quality mixed bed separation and analyzed kinetically to ensure the capability of producing 18 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	46 - 51% (H form)
Exchange Capacity	2.0 meq / ml minimum (H form)
Conversion to Hydrogen Form	99% minimum
TOC Leachables at 15 Bed Volumes	≤ 10 ppb maximum as a mixed bed with low TOC anion
Metals at 15 Bed Volumes	Low ppt levels (feed water dependent)
Kinetics	18 megohm (Siemens Kinetic Test)

### Physical Properties

Particle Screen Sizing	
+ 16 Mesh	2% maximum
- 50 Mesh	0.2% maximum
Uniformity Coefficient	1.5 maximum
Whole Beads (%)	95 minimum
Shipping Weight	51 lbs. / cu. ft.
Friability	500 gm / bead (average) 95% > 200 g / bead

### Operating Conditions

Operating pH Range	1 to 14
Service Flow Rate	1 to 50 gpm / ft <sup>2</sup>
Regenerant Flow Rate	
HCl	0.5 to 1.0 gpm / cu. ft.
H <sub>2</sub> SO <sub>4</sub>	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