



USF C-391H CATION RESIN

Description:

USF C-391H is a strong acid cation resin in bead form. The resin is manufactured from styrene highly cross-linked with divinylbenzene and has a macroporous structure. It is supplied in the hydrogen form. This resin has a good exchange capacity, excellent stability at elevated temperatures, and good chemical resistance over a wide pH range. This resin is well-suited for applications where fouling, osmotic shock, oxidation and physical attrition potentials are high. It is also widely used in the food industry.

Chemical Properties

Ionic Form (as shipped)	Hydrogen
Moisture Content	49 - 56% (H form)
Exchange Capacity	1.8 meq / ml minimum (H form)
Conversion to Hydrogen Form	99% minimum
Kinetics	> 15 megohm (USFilter Kinetics Test)

Physical Properties

Particle Screen Sizing	
+ 16 Mesh	5% maximum
- 50 Mesh	2% maximum
Whole Beads (%)	95 minimum
Shipping Weight	48 lbs. / cu. ft.

Operating Conditions

Operating pH Range	1 to 14
Service Flow Rate	1 to 5 gpm / ft ³
Backwash Rate	3 to 8 gpm / ft ²
Regenerant Flow Rate	
HCl	0.25 to 1.25 gpm / cu. ft.
H ₂ SO ₄	0.25 to 1.25 gpm / cu. ft.
Rinse Flow Rate	0.5 to 3.0 gpm / cu. ft.
Rinse Volume	40 to 75 gallons / cu. ft.
Maximum Operating Temperature	250°F