



USF A-254 MEG OH ANION RESIN

(Semiconductor Industry)

Description:

USF A-254 MEG OH anion resin is a specially processed resin for microelectronics applications. The starting material is USF A-254 that has been tested for both kinetics (the ability of the resin to perform) and terminal settling velocity (TSV) (separability and cross-contamination indicator). This resin is a uniform particle size strong base gel anion with a light amber bead appearance with superior bead strength. The resin is specially processed by USFilter to meet the following specifications for low TOC and enhanced separability.

Chemical Properties

Ionic Form (as Shipped)	Hydroxide
Moisture Content	42 – 50% (Cl form)
Exchange Capacity	1.0 meq / ml minimum (OH form)
Kinetics	18 megohm (USFilter Kinetics Test)
Conversion to Hydroxide Form	94% minimum
Impurities	
Chloride (Cl)	0.2% maximum
Sulfate (SO ₄)	0.2% maximum
Copper (Cu)	10 ppm on resin maximum
Iron (Fe)	50 ppm on resin maximum
Lead (Pb)	10 ppm on resin maximum
TOC via 16 Hr. Soak Test	< 50 ppm
Dynamic TOC Leachables @ 15 Bed Volumes	< 10 ppb TOC maximum as a mixed bed with low TOC anion

Physical Properties

Particle Size	
+ 20 Mesh	2% maximum
- 50 Mesh	0.2% maximum
Effective Size	590 ±50 µm
TSV Evaluation	100% mutual exclusivity between paired cation and anion
Whole Beads (%)	95 minimum
Chemical Cycled Shock Test	350 gm / bead average
> 200 gm / bead	95%
Shipping Weight	40 lbs. / cu. ft.
Maximum Operating Temperature	140°F