Graver Technologies

Product Specification

GRAVEX® GR-3-9 NG ULC
Nuclear Grade Ultra Low Cl
Hydrogen/Hydroxide

Spec No.	GTS-39-NG-ULC
Rev No.	2
Date	July 21, 2017

Properties	Limits	
Resin Type	Strongly Acidic Gel Cation Exchange Resin Strongly Basic Type 1 Gel Anion Exchange Resin	
Functionality	Sulfonic Acid / Quaternary Ammonium	
Matrix	Styrene Divinylbenzene	
Cation:Anion Ratio	1:1 Equivalents	
Total Exchange Capacity	2 meq/mL (Cation) 1.1 meq/mL (Anion)	(min) (min)
Ionic Conversion	99% Hydrogen 97% Hydroxide 0.05% Chloride 0.1% Sulfate	(min) (min) (max) (max)
Particle Size	2% plus 16 mesh (~1,190 µm) 5% minus 40 mesh (~420 µm) 0.5% minus 50 mesh (~300 µm)	(max) (max) (max)
Friability	Cation - 500 g/bead avg.; Anion - 350 g/bead avg Cation & Anion - 5% < 200 g/bead	(min) (max)
Whole Uncracked Bead	95%	(min)
Rinseable Organics - Anion		
Post UV Chloride	20 ppb	(max)
Post UV Sulfate	50 ppb	(max)
Extractable Organics - Anion		
Post UV Chloride	100 ppb	(max)
Post UV Sulfate	100 ppb	(max)
Metals (mg/dry kg)		
Aluminum	40	(max)
Calcium	50	(max)
Copper	10	(max)
Iron	50	(max)
Lead	10	(max)
Magnesium	50	(max)
Potassium	50	(max)
Sodium	40	(max)
Zinc	50	(max)
Silica	50	(max)