



Graver Technologies

Product Specification

GRAVEX® GR-3-0 US CG UPS Condensate Grade Hydrogen/Hydroxide

Spec No.	GTS-300-US-CG
Rev No.	0
Date	November 08, 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	1:3 Volume	
Total Exchange Capacity	1.9 meq/mL (Cation)	(min)
	1.0 meq/mL (Anion)	(min)
Water Retention Capacity	45-50% (Cation H Form) 43-48% (Anion Cl Form)	
Ionic Conversion	99% Hydrogen	(min)
	0.1% Sodium	(max)
	95% Hydroxide	(min)
	0.5% Chloride	(max)
	0.1% Sulfate	(max)
Particle Size	1.1 Uniformity Coefficient (Cation & Anion) (max)	
	650 +/- 50 µm mean (Cation)	
	590 +/- 90 µm mean (Anion)	
	2% plus 16 mesh (~1,190 µm) (Cation)	(max)
	2% plus 20 mesh (~840 µm) (Anion)	(max)
	1% minus 40 mesh (~420 µm) (Cation)	(max)
	0.2% minus 50 mesh (~300 µm) (Anion)	(max)
Particle Density	Approx 1.22 (Cation) Approx 1.08 (Anion)	
Whole Uncracked Bead	95% (Cation & Anion)	(min)
Cracked Bead	5% (Cation & Anion)	(max)
Impurities (mg/dry kg)	<u>Cation</u>	<u>Anion</u>
Copper	10	10 (max)
Iron	50	50 (max)
Silica	50	50 (max)
Sodium	40	40 (max)
Leachable Chloride	N/A	5 (max)
Leachable Sulfate	N/A	10 (max)
Leachable TOC	50	50 (max)
Superfines	50	50 (max)