CG8-H-UC1

NULL

Strong acid cation resin, styrene/DVB 8% crosslinked gel, highly uniform particle size, hydrogen form

ResinTech CG8-H-UC1 is a uniform particle size, hydrogen form 8% crosslinked gel strong acid cation resin. It is a workhorse cation resin optimized for industrial applications that require good regeneration efficiency. The uniform beads and somewhat smaller harmonic mean size yield minimal pressure loss and better regeneration efficiency compared to resins with Gaussian size distribution. CG8-H-UC1 is intended for use in all industrial two bed or mixed bed applications such as demineralization where a hydrogen form cation resin is required.

FEATURES & BENEFITS

- Uniformity Coefficient of 1.1
- High Efficiency in Counter Current systems
- Excellent hydraulics for Packed Bed's
- Highly converted to the Hydrogen Form

APPLICATIONS

- Packed Beds
- Demineralization / DI
- Mixed Bed Components

PHYSICAL PROPERTIES

Polymer Matrix	Styrene/DVB
Ionic Form (as shipped)	Hydrogen (H^+)
Functional Group	Sulfonic Acid
Physical Form	Spherical Beads
Uniformity Coefficient	1.10
Effective Particle Size	675 + 50 µm
< 50 mesh (300 µm) %	< 0.1%
Minimum Sphericity (%)	95
Reversible Swelling	5 to 9% (Na → H)
Capacity (meq/mL)	1.80
Moisture Retention (%)	47 to 56
Shipping Weight	49 - 51 lbs/cu.ft. (785 - 817 g/L)
Color	Amber to Brown
Regenerable	Regenerable

SUGGESTED OPERATING CONDITIONS

Maximum Temperature	265°F (129°C)
Minimum Bed Depth	24 in. (61.0 cm)
Maximum Pressure Loss	25 psi (172 kPa)
Backwash Expansion (%)	25 to 50
Operating pH Range	0 to 14
Flow Rate	
Working Service	1-10 gpm/cu.ft. (8-80 BV/h)

REACH COMPLIANCE

RESINTECH® INC.
INNOVATIONS IN ION EXCHANGE

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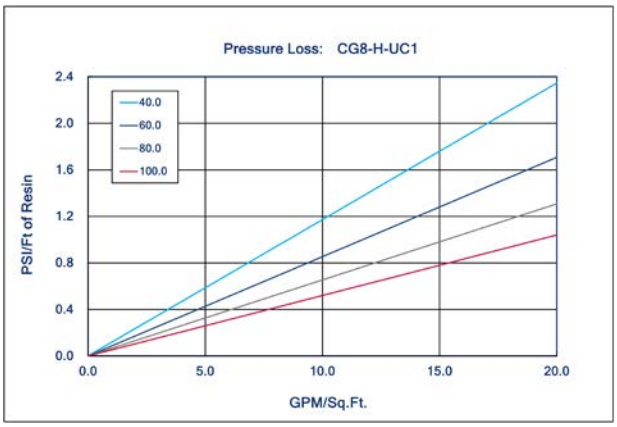
REGENERATION DETAILS

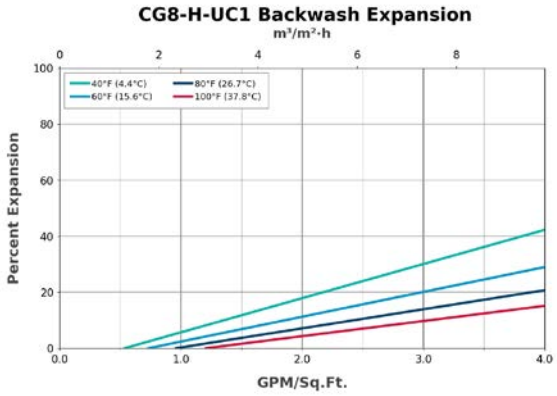
Hydrogen Cycle (H2SO4)	1 to 8%
Hydrogen Cycle (HCl)	5 to 10%
Regenerant Level	4-15 lbs/cu.ft. (64.1-240.3 g/L)
Regenerant Flow Rate	0.5-1.5 gpm/cu.ft. (4-12 BV/h)
Regenerant Contact Time	> 20 minutes
Displacement Flow Rate	Same as dilution water
Displacement Volume	10-15 gals/cu.ft. (1-2 BV)
Rinse Flow Rate	Same as service flow
Rinse Volume	Minimum of 30 gals/cu.ft. (4 BV)

PRESSURE LOSS



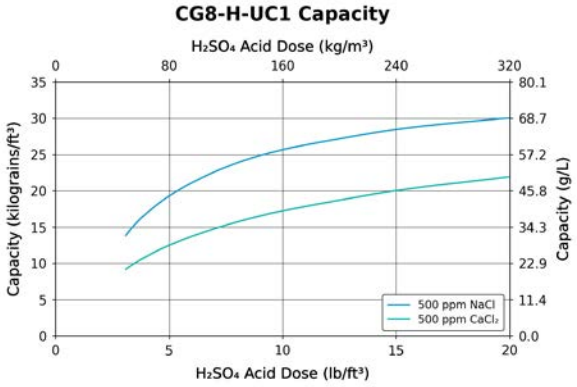
The graph above shows the expected pressure loss of ResinTech CG8-H-UC1 per foot of bed depth as a function of flow rate at various temperatures.

BACKWASH EXPANSION



The graph above shows the expansion characteristics of ResinTech CG8-H-UC1 as a function of flow rate at various temperatures.

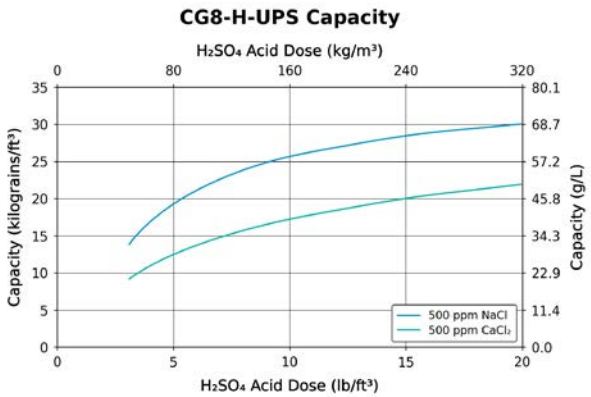
CAPACITY



Capacity and leakage data are based on the following: 2:1 Ca:Mg ratio, 500 ppm TDS as CaCO3, 0.2% hardness in the salt and 10% brine concentration applied co-currently through the resin over 30 minutes. No engineering downgrade has been applied.

DEMINERALIZATION

ResinTech **CG8-H-UC1** can be used as the cation component in a variety of demineralization applications where a hydrogen form cation resin is coupled with a hydroxide form anion resin. Common configurations include separate beds, mixed beds and other more complicated arrangements. Regeneration is accomplished with stepwise sulfuric acid or with hydrochloric acid.



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CERTIFICATIONS

REACH Registered

Shipping Weight

49 - 51 lbs/cu.ft. (785 - 817 g/L)

MATERIAL SAFETY DATA SHEETS (MSDS)

Material Safety Data Sheets (MSDS) are available for all products on the ResinTech website. They contain important health and safety information that may be needed to protect your employees and customers from any known health and safety hazards associated with our products. We recommend that you secure and study the pertinent MSDS for our products and any other products being used.

These suggestions and data are based on information we believe to be reliable. They are offered in good faith. However we do not make any guarantee or warranty. We caution against using these products in an unsafe manner or in violation of any patents; further we assume no liability for the consequences of any such actions.

Safety Data Sheets (SDS) are available at resintech.com

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