

CG8-H-UC1

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

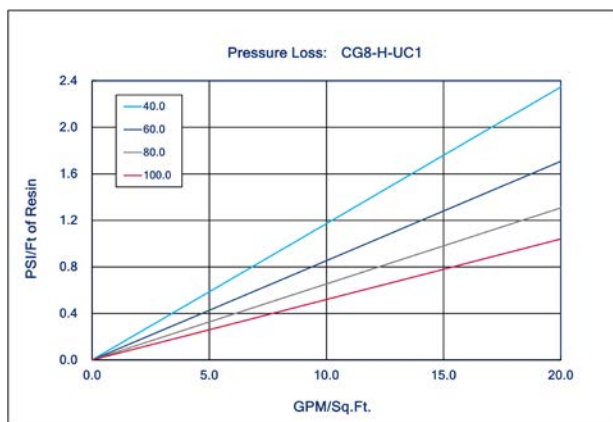


REACH Registered

CG8-H-UC1

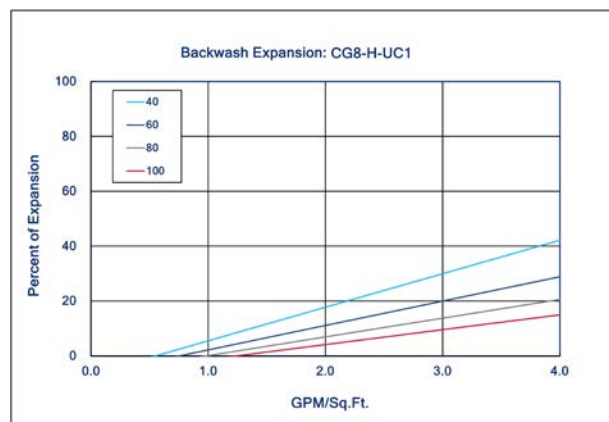
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|----------------------------|----------------------------|------------------------|------------------------------------|
| Polymer Matrix | Styrene/DVB | Reversible Swelling | 5 to 9% (Na → H) |
| Ionic Form (as shipped) | Hydrogen (H ⁺) | Uniformity | UC1 |
| Functional Group | Sulfonic Acid | Uniformity Coefficient | 1.10 |
| Physical Form | Spherical Beads | Capacity (meq/mL) | 1.80 |
| Particle Size US Mesh (µm) | 20 (841) to 40 (400) | Moisture Retention (%) | 47 to 56 |
| < 50 mesh (300 µm) % | < 0.1% | Shipping Weight | 49 - 51 lbs/cu.ft. (785 - 817 g/L) |
| Minimum Sphericity (%) | 95 | Color | Amber to Brown |
| | | Regenerable | Regenerable |

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.

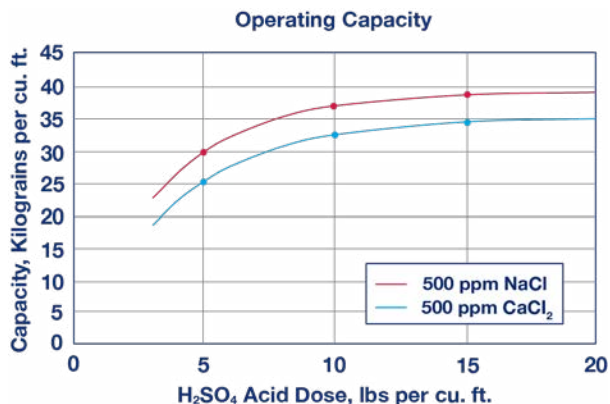
SUGGESTED OPERATING CONDITIONS

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



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.



REGENERATION DETAILS

| | | | |
|--|----------------------------------|------------------------|----------------------------|
| Hydrogen Cycle (H ₂ SO ₄) | 1 to 8% | Displacement Flow Rate | Same as dilution water |
| Hydrogen Cycle (HCl) | 5 to 10% | Displacement Volume | 10-15 gals/cu.ft. (1-2 BV) |
| Regenerant Level | 4-15 lbs/cu.ft. (64.1-240.3 g/L) | Rinse Flow Rate | Same as service flow |
| Regenerant Flow Rate | 0.5-1.5 gpm/cu.ft. (4-12 BV/h) | Rinse Volume | 35-60 gals/cu.ft. (5-8 BV) |
| Regenerant Contact Time | > 20 minutes | | |

SAFETY DATA SHEETS (SDS)

Safety Data Sheets (SDS) 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

