

CG8-H-UPS

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

ResinTech CG8-H-UPS 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 in a hydrogen form cation resin. CG8-H-UPS is intended for use in all industrial applications such as demineralization where a hydrogen form cation resin is required. The uniform beads and somewhat smaller harmonic mean size yield minimal pressure loss and better regeneration efficiency compared to resins with Gaussian size distribution.



FEATURES & BENEFITS

- Uniform particle size
- Industrial demineralizing applications
- Low color throw
- Superior physical stability

APPLICATIONS

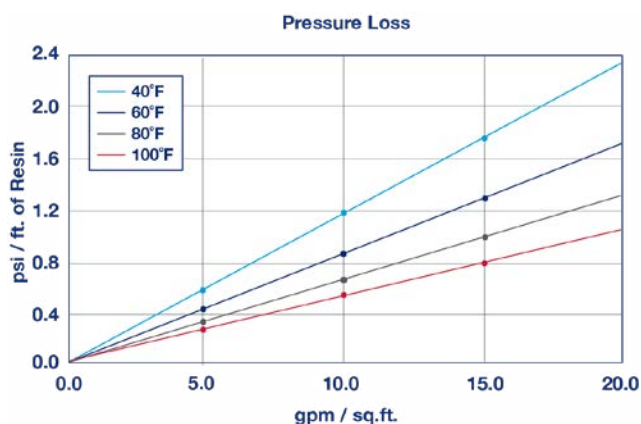
- Packed Beds
- Demineralization / DI
- Mixed Bed Components

REACH Registered

CG8-H-UPS

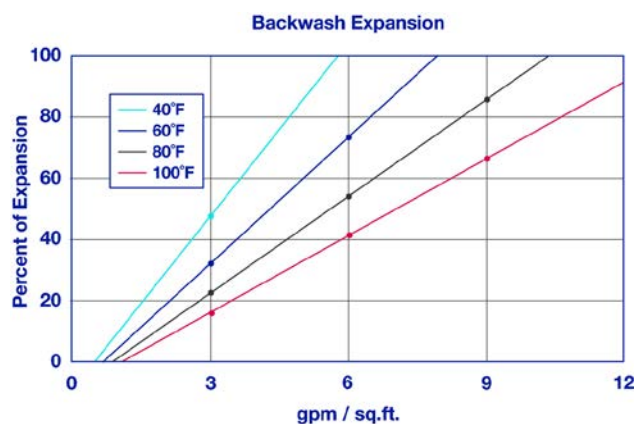
Polymer Matrix	Styrene/DVB	Reversible Swelling	5 to 9% (Na → H)
Polymer Type	Gel	Uniformity	UPS
Ionic Form (as shipped)	Hydrogen (H ⁺)	Uniformity Coefficient	1.25
Functional Group	Sulfonic Acid	Capacity (meq/mL)	1.80
Physical Form	Spherical Beads	Moisture Retention (%)	47 to 56
Particle Size US Mesh (µm)	20 (841) to 40 (400)	Shipping Weight	49 - 51 lbs/cu.ft. (785 - 817 g/L)
< 50 mesh (300 µm) %	< 0.5%	Color	Amber to Brown
Minimum Sphericity (%)	95	Regenerable	Regenerable

PRESSURE LOSS



The graph above shows the expected pressure loss of ResinTech CG8-H-UPS 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-UPS as a function of flow rate at various temperatures.

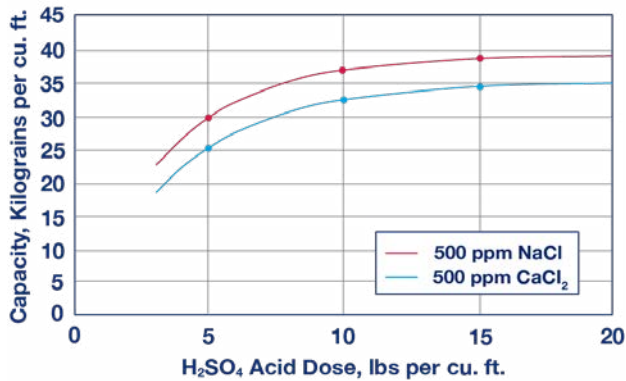
SUGGESTED OPERATING CONDITIONS

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		



CAPACITY GRAPH 1

Operating Capacity

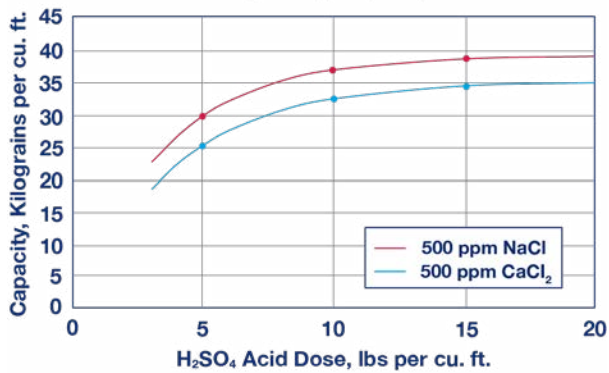


Capacity and leakage data are based on the following: 2:1 Ca:Mg ratio, 500 ppm TDS as CaCO₃, 0.2% hardness in the salt and 10% brine concentration applied co-currently through the resin over 30 minutes. No engineering downgrade has been applied.

DEMINERALIZATION

ResinTech **CG8-H-UPS** 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.

Operating Capacity



REGENERATION DETAILS

Hydrogen Cycle (H2SO4)	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		

PACKAGING

Standard

42 cu.ft. Supersack | 7 cu.ft. Drum
 1 cu.ft. Bag | 5 cu.ft. Drum

Metric

25L Bag | 140L Drum

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

