

MAGNA CG10-H

STRONG ACID CATION

POLYSTYRENIC GEL
10% CROSSLINKED
HYDROGEN FORM

ResinTech CG10-H is an amber-colored 10% cross-linked gel strong acid cation resin in the hydrogen form. It has a higher capacity than other hydrogen form cation resins and high resistance to both thermal and chemical oxidation. CG10-H is intended for industrial applications where high capacity and durability are desired in a hydrogen form cation resin. It can be used as the cation component in demineralization along with a hydroxide form anion resin.

APPLICATIONS

- Demineralization
- Cation Component in Mixed Beds

TYPICAL PROPERTIES & PHYSICAL CHARACTERISTICS	
Polymer Matrix	Styrenic Gel
Ionic Form	Hydrogen
Functional Group	Sulfonic Acid
Physical Form	Spherical Beads
Particle Size	16 to 50 US Mesh (297 - 1190 µm)
% < 50 mesh (300µm)	< 1%
Minimum Sphericity	90%
Uniformity Coefficient	1.6
Reversible Swelling	H to Na -4% to -7%
Temp Limit	265°F (129°C)
Capacity (meq/mL)	2.0
Moisture Retention	44% to 52%
Shipping Weight	51 - 53 lbs/ft ³ (817 - 849 g/L)
Color	Amber
Regenerability	Yes

PACKAGING OPTIONS

- 1 ft³ bags
- 1 ft³ boxes
- 1 ft³ drums
- 7 ft³ drums
- 42 ft³ supersacks

Revision 1.1
ResinTech, Inc.®

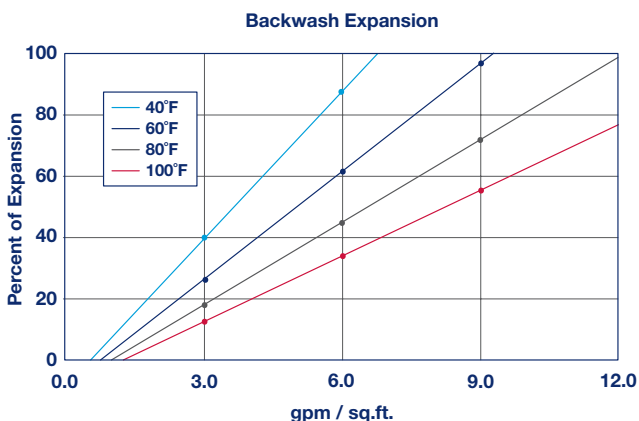
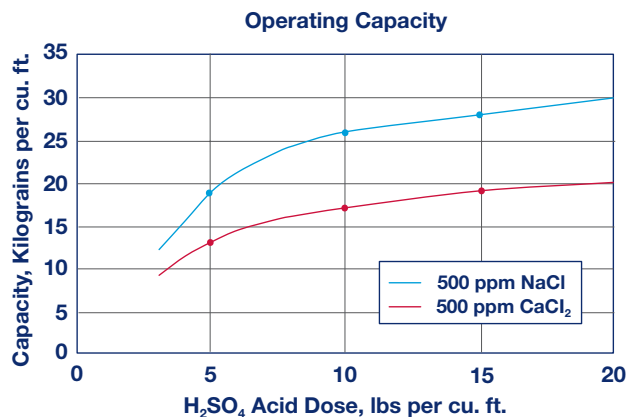
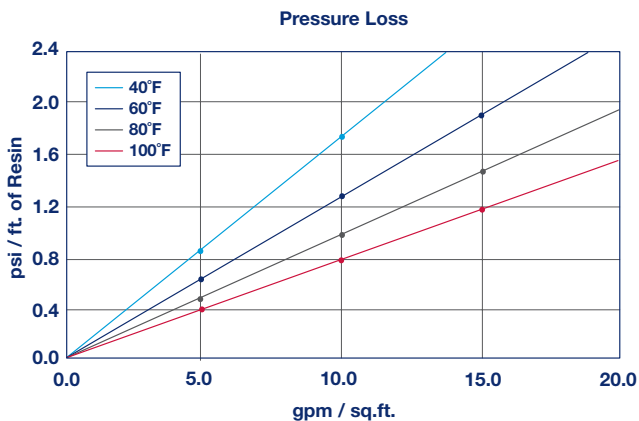


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Capacity based on 500 ppm of stated salt (as CaCO₃) with 0% alkalinity, 36 in. bed depth, flow rate of 2 to 4 gpm per cu. ft. and >30 min. chemical injection time. Sulfuric acid concentration must be stepwise when calcium concentration exceeds 20% of total cations. No engineering downgrade has been applied.

SUGGESTED OPERATING CONDITIONS

Maximum continuous temperature	265°F
Hydrogen form	
Minimum bed depth	24 inches
Backwash expansion	25 to 50 percent
Maximum pressure loss	25 psi
Operating pH range	0 to 14 SU
Regenerant Concentration	
Hydrogen cycle	5 to 10 percent HCl
Hydrogen cycle	1 to 8 percent H ₂ SO ₄
Salt cycle	10 to 15 percent NaCl
Regenerant level	4 to 15 lbs./cu.ft.
Regenerant flow rate.	0.5 to 1.5 gpm/cu.ft.
Regenerant contact time	>20 minutes
Displacement flow rate	Same as dilution water
Displacement volume	10 to 15 gallons/cu.ft.
Rinse flow rate	Same as service flow
Rinse volume	35 to 60 gallons/cu.ft.
Service flow rate	1 to 10 gpm/cu.ft.

DEMINEERALIZATION

CG10-H can be used as the cation component in a variety of demineralization configurations where a hydrogen form cation resin is coupled with a hydroxide form anion resin. The high density of CG10-H provides ideal separation in polishing mixed beds. CG10-H has higher total capacity and lower chemical efficiency compared to CG8-H.

Note: These guidelines describe average low risk operating conditions. They are not intended to be absolute minimums or maximums. For operation outside these guidelines, contact ResinTech Technical Support