

# PRODUCT SPECIFICATION SHEET

## MAGNA CG10-HP

STRONG ACID CATION

HIGH-PURITY GRADE  
POLYSTYRENIC GEL  
10% CROSSLINKED  
SODIUM FORM

ResinTech CG10-HP is a premium grade, high purity strong acid cation resin in sodium form. It is amber in color and made from a 10% cross-linked gel. CG10-HP offers high resistance to physical, thermal, and chemical degradation. Gold Seal Certified by the WQA for use in potable water applications, it is intended for use when the importance of durability and high capacity outweigh the higher amounts of chemicals needed for regeneration.

### APPLICATIONS

- Softening - Industrial
- Demineralization
- Softening - High Temperature



TYPICAL PROPERTIES & PHYSICAL CHARACTERISTICS	
Polymer Matrix	Styrenic Gel
Ionic Form	Sodium
Functional Group	Sulfonic Acid
Physical Form	Spherical Beads
Particle Size	16 to 50 US Mesh (297 - 1190 µm)
% < 50 mesh (300µm)	< 1%
Minimum Sphericity	93%
Uniformity Coefficient	1.6
Reversible Swelling	Na to Ca -5% to -3%
Temp Limit	280°F (138°C)
Capacity (meq/mL)	2.2
Moisture Retention	39% to 45%
Shipping Weight	53 - 55 lbs/ft <sup>3</sup> (849 - 881 g/L)
Color	Amber
Regenerability	Yes

### CERTIFICATIONS

- WQA Gold Seal\*
- Kosher Certified
- FDA Compliance\*\*

\* NSF/ANSI/CAN 61: Drinking Water System Components - Health Effects

\*\* Paragraph 21CFR173.25 of the Food Additives Regulations of the US FDA

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### PACKAGING OPTIONS

- 1 ft<sup>3</sup> bags
- 1 ft<sup>3</sup> boxes
- 1 ft<sup>3</sup> drums
- 7 ft<sup>3</sup> drums
- 42 ft<sup>3</sup> supersacks

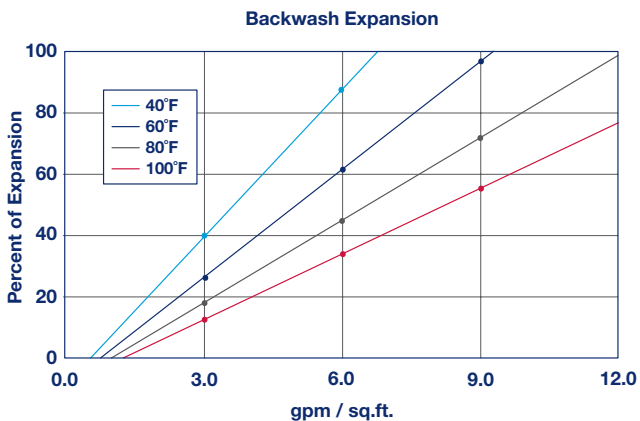
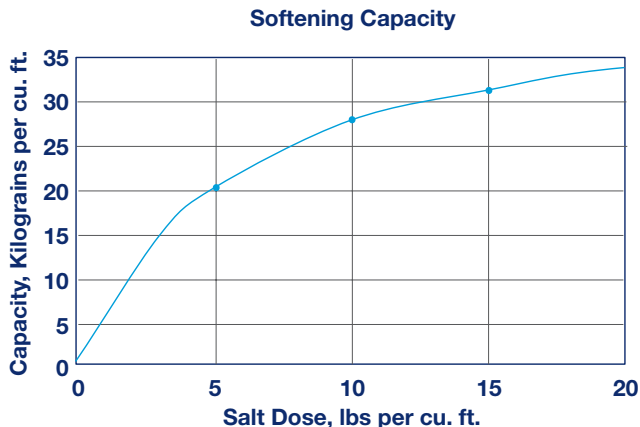
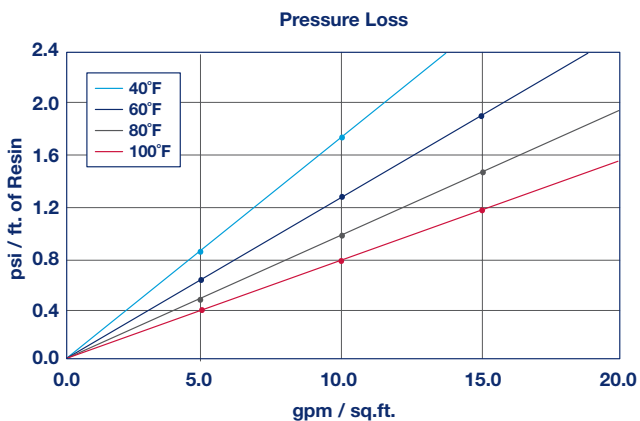


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Capacity and leakage data are based on the following: 2:1 Ca:Mg ratio, 500 ppm TDS as CaCO<sub>3</sub>, 0.2% hardness in the salt and 10% brine concentration applied co-currently through the resin over 30 minutes. No engineering downgrade has been applied.

### SUGGESTED OPERATING CONDITIONS

Maximum continuous temperature	280°F
Sodium 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 <sub>2</sub> SO <sub>4</sub>
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.

### HIGH TEMPERATURE USE

ResinTech CG10-HP is suitable for operation at temperatures as high as 280°F. At temperatures above 212°F, dissolved oxygen in the feedwater is a powerful oxidant and can chemically damage the resin. Oxygen levels in the feed should be reduced to less than 0.05 ppm to ensure a reasonable service life of the resin.

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

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