

# PRODUCT SPECIFICATION SHEET

## MAGNA CG10-H-CP

STRONG ACID CATION

CONDENSATE POLISHING GRADE  
POLYSTYRENIC GEL  
10% CROSSLINKED  
HYDROGEN FORM

ResinTech CG10-H-CP is a condensate polisher grade 10% cross-linked strong acid cation gel resin in the hydrogen form. It offers high capacity and resistance to thermal and chemical oxidation. A dark-colored, UPS resin, CG10-H-CP yields minimal pressure loss and perfect separation from "CP" grade anion resins. It is ideally suited for high flow rate, deep bed condensate polishing applications when paired with either SBMP1-OH-CP or SBG1-OH-CP.

### APPLICATIONS

- Condensate Polishing
- Amine Cycle Polishing

TYPICAL PROPERTIES & PHYSICAL CHARACTERISTICS	
Polymer Matrix	Styrenic Gel
Ionic Form	Hydrogen
Functional Group	Sulfonic Acid
Physical Form	Spherical Beads
Particle Size	20 to 40 US Mesh (400 - 841 $\mu$ m)
% < 50 mesh (300 $\mu$ m)	> .5%
Minimum Sphericity	95%
Uniformity Coefficient	1.25
Reversible Swelling	H to Na -4% to -7%
Temp Limit	265°F (129°C)
Capacity (meq/mL)	2.15
Moisture Retention	44% to 52%
Trace metals, dry resin, max. (ppm)	Na (100); Fe (50); Cu (50); Al (50); Heavy metals [as Pb] (20)
Shipping Weight	50 - 52 lbs/ft <sup>3</sup> (801 - 833 g/L)
Color	Dark Brown to Black
Regenerability	Yes
Uniform Particle Size	Yes

### 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

Revision 1.2  
ResinTech, Inc.®

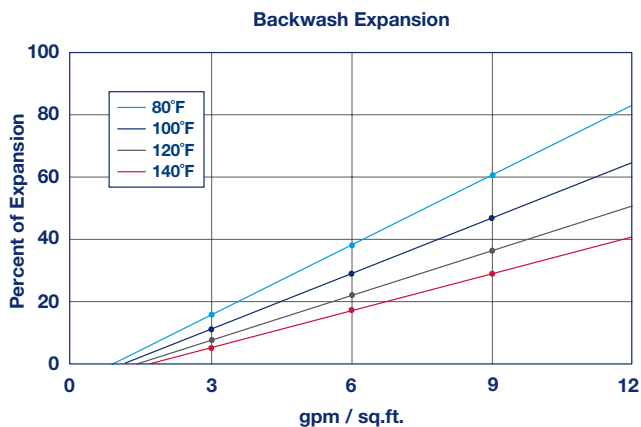
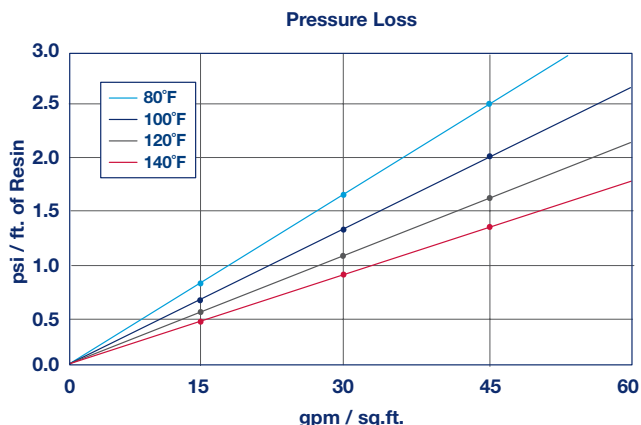


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### CONDENSATE POLISHING

ResinTech CG10-H-CP is ideally suited for high pressure condensate polishing applications. High DVB crosslinking and high capacity help provide long service life when treating condensates that contain ammonia or other amines. CG10-H-CP has narrowly graded particle size and slightly larger bead size to provide low pressure loss and help improve separation from CP grade anion resins.

### AMINE CYCLE POLISHING

Condensate polishing resins such as CG10-H-CP can be converted into the amine form before use, or special ordered in the amine form. Amine form resin is useful because this type of resin does not contain sodium and it does not remove the amine that is already present in the condensate. Amine form resins exchange ions in a similar fashion to those in the hydrogen form but without the release of hydrogen back into the condensate.

### MAXIMUM IMPURITIES (Crush Strength)

Average, grams per bead > 500  
Percent greater than 200 grams > 95

### SUGGESTED OPERATING CONDITIONS

Maximum continuous temperature	
Hydrogen form	265°F
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>
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	2 to 15 gpm/cu.ft.

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