

# PRODUCT SPECIFICATION SHEET

## MAGNA CG8

STRONG ACID CATION

**POLYSTYRENIC GEL**  
**8% CROSSLINKED**  
**SODIUM FORM**

ResinTech CG8 is a strong acid cation resin in sodium form. It is amber in color and made from 8% cross-linked gel. It is a workhorse cation resin optimized for commercial/industrial and residential softening applications that require good regeneration efficiency and oxidative stability. CG8 is intended for use in all commercial and industrial applications including both softening and demineralization.

### APPLICATIONS

- Softening - Industrial
- Demineralization
- Iron Removal
- Ammonia Removal

TYPICAL PROPERTIES & PHYSICAL CHARACTERISTICS	
<b>Polymer Matrix</b>	Styrenic Gel
<b>Ionic Form</b>	Sodium
<b>Functional Group</b>	Sulfonic Acid
<b>Physical Form</b>	Spherical Beads
<b>Particle Size</b>	16 to 50 US Mesh (297 - 1190 µm)
<b>% &lt; 50 mesh (300µm)</b>	≤ 1%
<b>Minimum Sphericity</b>	98%
<b>Uniformity Coefficient</b>	1.6
<b>Reversible Swelling</b>	Na to H 5% to 9%
<b>Temp Limit</b>	280°F (138°C)
<b>Capacity (meq/mL)</b>	2.0
<b>Moisture Retention</b>	42% to 49%
<b>Shipping Weight</b>	51 - 53 lbs/ft <sup>3</sup> (817 - 849 g/L)
<b>Color</b>	Amber
<b>Regenerability</b>	Yes

### CERTIFICATIONS

- Kosher Certified
- Halal Certified

### PACKAGING OPTIONS

- 500 ml samples
- 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

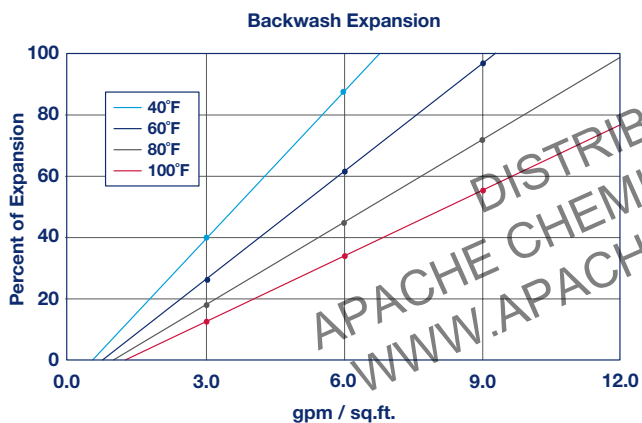
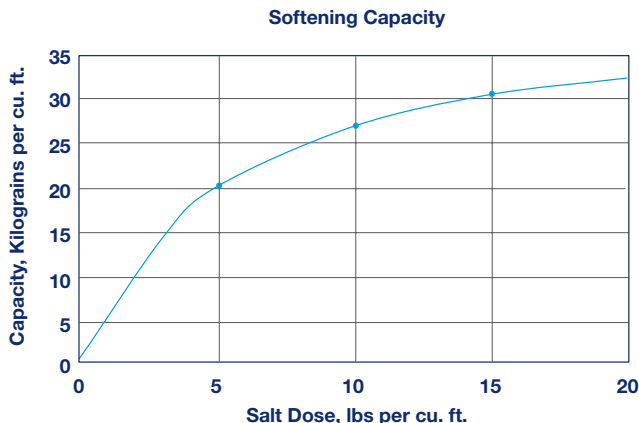
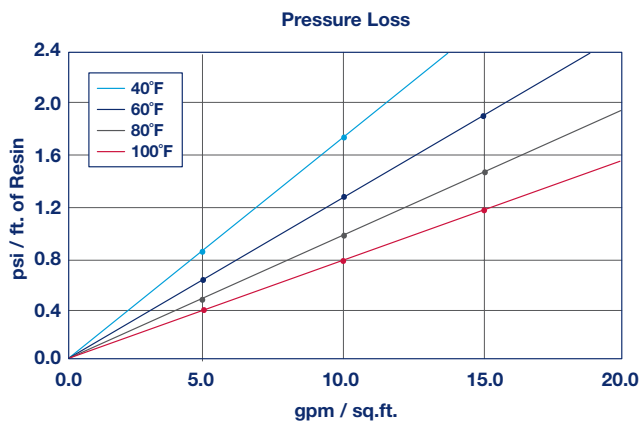
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Capacity and leakage data are based on the following: 2:1 Ca:Mg ratio, 500 ppm TDS as CaCO<sub>3</sub>, 0.2% hardness in the salt and 10% brine concentration applied co-currently through the resin over 30 minutes. No engineering downgrade has been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

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

### IRON REMOVAL

CG8 has good capacity for ferrous iron. Iron content in the feedwater should not be more than 1 mg/L Fe per each 17 mg/L of hardness.

### AMMONIA REMOVAL

CG8 is slightly selective for ammonia compared to sodium but hardness is much more preferred. Ammonia is not ionized at pH above 9 and is not well removed when the pH is significantly alkaline.

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