

## MAGNA CG8-H-BL

STRONG ACID CATION

**BLACK POLYSTYRENIC GEL**  
**8% CROSSLINKED**  
**HYDROGEN FORM**

ResinTech CG8-H-BL is a dark-colored hydrogen form 8% cross-linked gel strong acid cation resin. It is a workhorse cation resin with properties similar to other products in the CG8 family. CG8-H-BL is intended for use in all industrial applications such as demineralization where a hydrogen form cation resin is required and for mixed beds where its dark color makes visual identification of the cation/anion interface plainly evident.

### APPLICATIONS

- Demineralization
- Cation Component in Mixed Beds

| TYPICAL PROPERTIES & PHYSICAL CHARACTERISTICS |   |
|---|---|
| <b>Polymer Matrix</b>                         | Styrenic Gel                                |
| <b>Ionic Form</b>                             | Hydrogen                                    |
| <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>                     | 93%   |
| <b>Uniformity Coefficient</b>                 | 1.6   |
| <b>Reversible Swelling</b>                    | H to Na -5% to -8%                          |
| <b>Temp Limit</b>                             | 265°F (129°C)                               |
| <b>Capacity (meq/mL)</b>                      | 1.8   |
| <b>Moisture Retention</b>                     | 47% to 56%                                  |
| <b>Shipping Weight</b>                        | 49 - 51 lbs/ft <sup>3</sup> (785 - 817 g/L) |
| <b>Color</b>                                  | Dark Brown to Black                         |
| <b>Regenerability</b>                         | 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

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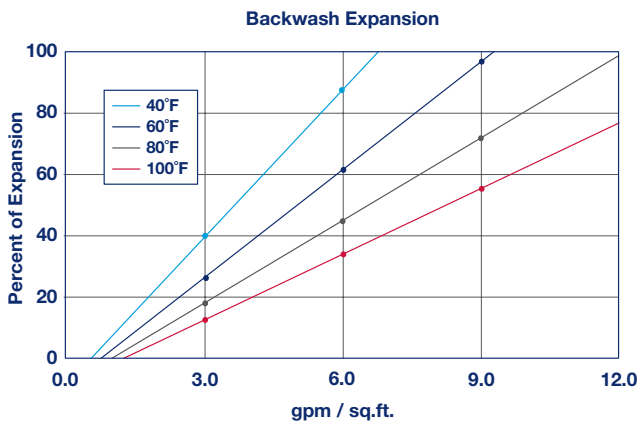
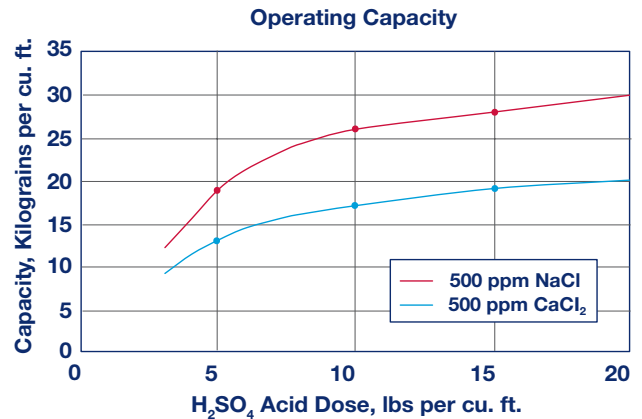
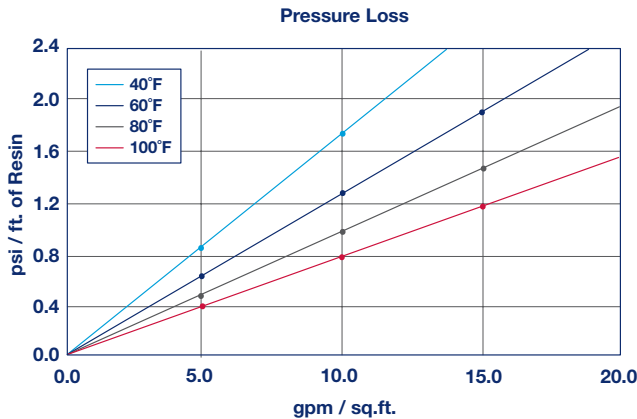


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Capacity based on 500 ppm of stated salt (as CaCO<sub>3</sub>) with 0% alkalinity, 36 in. bed depth, flow rate of 2 to 4 gpm per cu. ft. and >30 min. chemical injection time. Sulfuric acid concentration must be stepwise when calcium concentration exceeds 20% of total cations. No engineering downgrade has been applied.

### SUGGESTED OPERATING CONDITIONS

|                                |   |
|--------------------------------|---|
| Maximum continuous temperature | 265°F   |
| 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.                            |

### DEMINERALIZATION

CG8-H-BL can be used as the cation component in separate bed and mixed bed demineralization applications where a hydrogen form cation resin is coupled with a hydroxide form anion resin. Regeneration is accomplished with stepwise sulfuric acid or with hydrochloric acid.

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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