

# PRODUCT SPECIFICATION SHEET

## MAGNA CG8-K

STRONG ACID CATION

**POLYSTYRENIC GEL**  
**8% CROSSLINKED**  
**POTASSIUM FORM**

ResinTech CG8-K is an amber-colored 8% cross-linked gel strong acid cation resin in the potassium form. It has a capacity and other characteristics similar to other products in the CG8 family. CG8-K can be used interchangeably with sodium form CG8. It is intended for use in water softening and other neutral salt cation exchange applications where the release of sodium ions is undesirable.

### APPLICATIONS

- Softening - Industrial
- Sodium Removal

| TYPICAL PROPERTIES & PHYSICAL CHARACTERISTICS |   |
|---|---|
| <b>Polymer Matrix</b>                         | Styrenic Gel                                |
| <b>Ionic Form</b>                             | Potassium                                   |
| <b>Functional Group</b>                       | Sulfonic Acid                               |
| <b>Physical Form</b>                          | Spherical Beads                             |
| <b>Particle Size</b>                          | 16 to 45 US Mesh (354 - 1190 µm)            |
| <b>% &lt; 50 mesh (300µm)</b>                 | < 1%  |
| <b>Minimum Sphericity</b>                     | 93%   |
| <b>Uniformity Coefficient</b>                 | 1.4   |
| <b>Reversible Swelling</b>                    | K to Na 3% to 5%                            |
| <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>                        | 49 - 51 lbs/ft <sup>3</sup> (785 - 817 g/L) |
| <b>Color</b>                                  | Amber                                       |
| <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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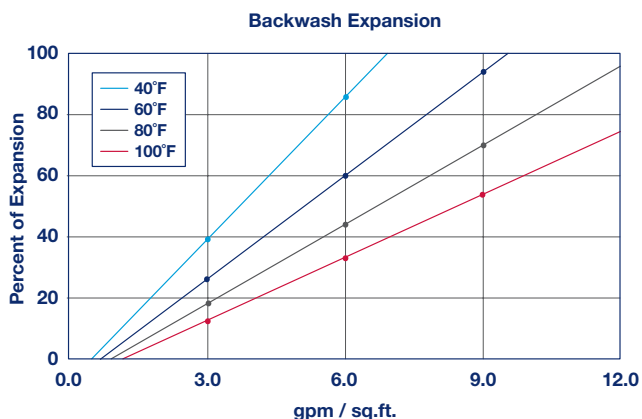
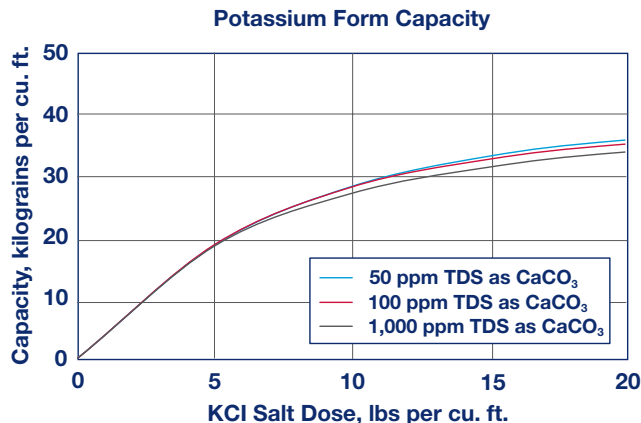
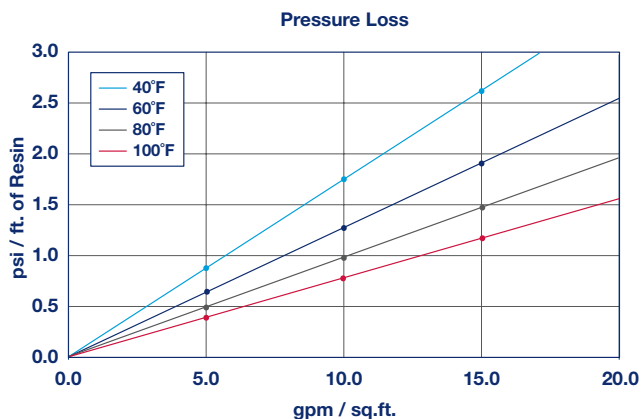


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Capacity and leakage data are based on the following: 2:1 Ca:Mg ratio, 500 ppm TDS as CaCO<sub>3</sub>, 0.2% hardness in the salt and 10% brine concentration applied co-currently through the resin over 30 minutes. No engineering downgrade has been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

### SUGGESTED OPERATING CONDITIONS

|                                |                         |
|--------------------------------|-------------------------|
| Maximum continuous temperature | 280°F                   |
| Sodium form                    | 280°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       |                         |
| Salt cycle                     | 10 to 15 percent KCl    |
| 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

### POTASSIUM FORM SOFTENING

CG8-K is supplied in the potassium rather than the sodium form. Potassium form resins are regenerated with potassium chloride rather than sodium chloride. CG8-K produces softened water with reduced sodium content. Except for the use of a different salt, the capacity and other operating characteristics are virtually identical to sodium form softening.

### SODIUM REMOVAL

Potassium form resins such as CG8-K have substantial capacity to remove sodium as well as hardness. The resin prefers hardness over sodium so it is possible to dump sodium if the resin is operated past sodium breakthrough.

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