

# CG8-C

## Strong acid cation resin, styrene/DVB 8% crosslinked gel, coarse mesh, sodium form

ResinTech CG8-C is a coarse mesh, strong acid cation resin in the sodium form. It is amber in color and made from a 8% crosslinked gel. It has the same physical characteristics, regeneration efficiency, and oxidative stability as other resins in the CG8 family. CG8-C is intended for use in industrial applications where minimizing pressure loss is essential even when suspended solids may be present.



### FEATURES & BENEFITS

- Uniform coarse particle size
- Industrial softening and demineralizing applications
- Low color throw
- Superior physical stability
- Complies with US FDA regulations

### APPLICATIONS

- High Flow Rate
- Softening



Meets NSF/ANSI/CAN 44  
 Meets NSF/ANSI/CAN 61  
 Meets NSF/ANSI/CAN 372

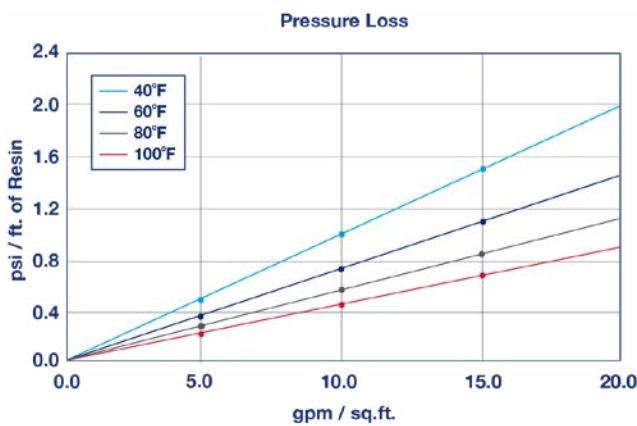
REACH Registered  
 Kosher Certified  
 Halal Certified

Conforms to §21CFR173.25 of the USFDA Food Additives Regulations

CG8-C

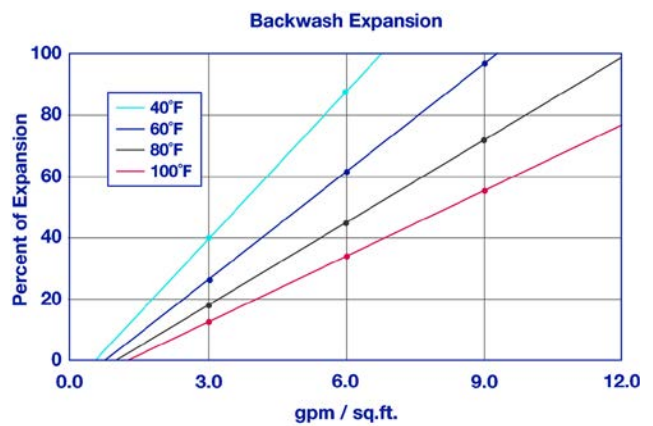
Polymer Matrix	Styrene/DVB	Reversible Swelling	5 to 9% (Na → H)
Polymer Type	Gel	Uniformity	Gaussian
Ionic Form (as shipped)	Sodium (Na <sup>+</sup> )	Uniformity Coefficient	1.40
Functional Group	Sulfonic Acid	Capacity (meq/mL)	2.00
Physical Form	Spherical Beads	Moisture Retention (%)	42 to 49
Particle Size US Mesh (µm)	16 (1190) to	Shipping Weight	51 - 53 lbs/cu.ft. (817 - 849 g/L)
< 50 mesh (300 µm) %	< 1%	Color	Amber
Minimum Sphericity (%)	93	Regenerable	Regenerable

**PRESSURE LOSS**



The graph above shows the expected pressure loss of ResinTech CG8-C per foot of bed depth as a function of flow rate at various temperatures.

**BACKWASH EXPANSION**



The graph above shows the expansion characteristics of ResinTech CG8-C as a function of flow rate at various temperatures.

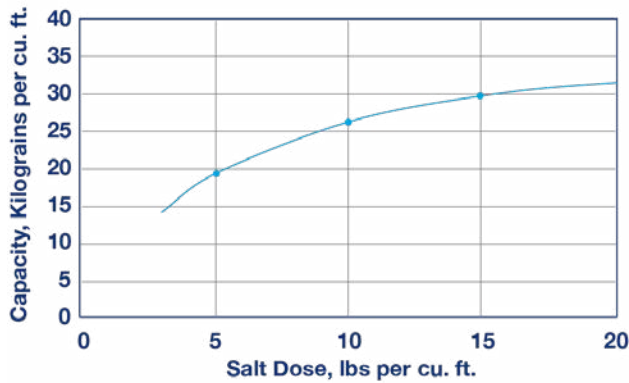
**SUGGESTED OPERATING CONDITIONS**

Maximum Temperature	280°F (138°C)	Operating pH Range	0 to 14
Minimum Bed Depth	24 in. (61.0 cm)	Flow Rate	
Maximum Pressure Loss	25 psi (172 kPa)	Working Service	1-10 gpm/cu.ft. (8-80 BV/h)
Backwash Expansion (%)	25 to 50		



**CAPACITY GRAPH 1**

**CG8-C Softening Capacity**



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.

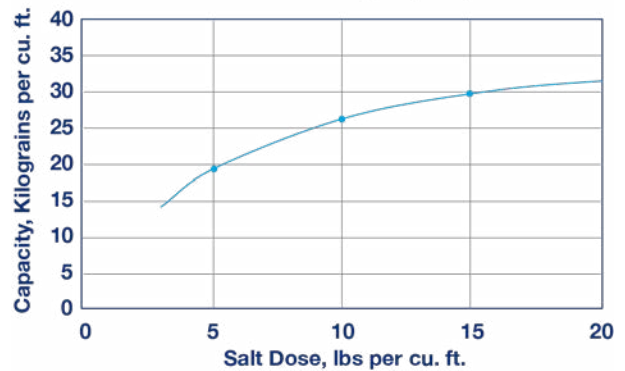
**HIGH FLOW RATE USE**

ResinTech **CG8-C** is made with a large bead size which increases the void spaces between the beads and reduces the surface area, thus reducing the resistance to water flow through the resin bed. Because the resin bed has lower pressure loss the resin can operate at high flow rates. High flow rates are useful in polishing applications where a large resin volume is not needed to provide a long throughput between regenerations. It should be understood that the rate of ion exchange is somewhat slower due to the large bead size.

**SOFTENING**

ResinTech **CG8-C** is an 8% crosslinked cation resin optimized for industrial softening applications. **CG8-C** is suitable for hot water applications and for waters that contain modest levels of chlorine.

**CG8-C Softening Capacity**



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 cocurrently through the resin over 30 minutes. No engineering downgrade has been applied.

**REGENERATION DETAILS**

Salt Cycle (NaCl)	10 to 15%	Displacement Flow Rate	Same as dilution water
Regenerant Level	4-15 lbs/cu.ft. (64.1-240.3 g/L)	Displacement Volume	10-15 gals/cu.ft. (1-2 BV)
Regenerant Flow Rate	0.5-1.5 gpm/cu.ft. (4-12 BV/h)	Rinse Flow Rate	Same as service flow
Regenerant Contact Time	> 20 minutes	Rinse Volume	35-60 gals/cu.ft. (5-8 BV)

**PACKAGING**

**Standard**

1 cu.ft. Bag | 42 cu.ft. Supersack  
 5 cu.ft. Drum | 7 cu.ft. Drum

**Metric**

140L Drum | 200L Drum

**SAFETY DATA SHEETS (SDS)**

Safety Data Sheets (SDS) are available for all products on the ResinTech website. They contain important health and safety information that may be needed to protect your employees and customers from any known health and safety hazards associated with our products. We recommend that you secure and study the pertinent MSDS for our products and any other products being used.

These suggestions and data are based on information we believe to be reliable. They are offered in good faith. However we do not make any guarantee or warranty. We caution against using these products in an unsafe manner or in violation of any patents; further we assume no liability for the consequences of any such actions.

Safety Data Sheets (SDS) are available at [resintech.com](http://resintech.com)

