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CG10-C

Coarse Mesh Strong Acid Cation Resin, Polystyrenic Gel crosslinked with 10% Divinylbenzene, Sodium Form

Features & Benefits

- 10% DIVINYLBENZENE
- LOW COLOR THROW
- SUPERIOR PHYSICAL STABILITY
- COMPLIES WITH US FDA REGULATIONS
- COARSE PARTICLE SIZE

DESCRIPTION

ResinTech CG10-C is a coarse mesh, premium-grade strong acid cation resin in sodium form. It is amber in color and made from a 10% crosslinked gel. It has the same high resistance to physical, thermal, and chemical degradation as other resins in the CG10 family. CG10-C is intended for use in industrial applications where minimizing pressure loss is essential even when suspended solids may be present.

PHYSICAL PROPERTIES

Polymer Matrix	Styrene/DVB
Polymer Type	Gel
Functional Group	Sulfonic Acid
Ionic Form (as shipped)	Sodium (Na^+)
Physical Form	Spherical Beads
Capacity (meq/mL)	2.20
Moisture Retention (%)	39 to 45
Shipping Weight	53 lbs/cu.ft. (~849 g/L)
Reversible Swelling (%)	4 to 8 (Na → H)
Particle Size	US Mesh (µm): 16 (1190) to

< 50 mesh (300 µm) (%)	< 0.5%
Minimum Sphericity (%)	93
Uniformity Coefficient	1.40
Color	Amber

CERTIFICATIONS

REACH Registered	Yes
Kosher Certified	Yes
Halal Certified	Yes
Satisfies USFDA Regulations ¶21CFR173.25	Yes

STANDARD PACKAGING

1 cu.ft. Bag | 42 cu.ft. Supersack

25L Bag | 1000L Supersack

OPTIONAL PACKAGING

5 cu.ft. Drum | 7 cu.ft. Drum

140L Drum | 200L Drum

TARGET CONTAMINANTS

Calcium | Iron | Magnesium | Manganese

PRIMARY APPLICATIONS

Softening - High Flow Rate | Softening - Industrial

OPERATING CONDITIONS

Maximum Continuous Temperature	280°F (138°C)
Bed Depth	24 in. (61.0 cm)
Backwash Expansion	25 to 50%
Maximum Pressure Loss	25 psi (172.38 kPa)
Operating pH Range	0 to 14

PRESSURE LOSS

REGENERATION DETAILS

Service Flow Rate	1 - 10 gpm/cu.ft. (8 - 80 BV/h)
Salt Cycle (NaCl) Concentration	10 to 15%
Regeneration Level	4 - 15 lbs/cu.ft. (64.1 - 240.3 g/L)
Regeneration Flow Rate	0.5 - 1.5 gpm/cu.ft. (4 - 12 BV/h)
Regenerant contact time	> 20 minutes
Displacement flow rate	Same as dilution water
Displacement Volume	10 to 15 gals/cu.ft. (1 to 2 BV)
Rinse Flow Rate	Same as service flow
Rinse Volume	35 - 60 gals/cu.ft. (5 - 8 BV)

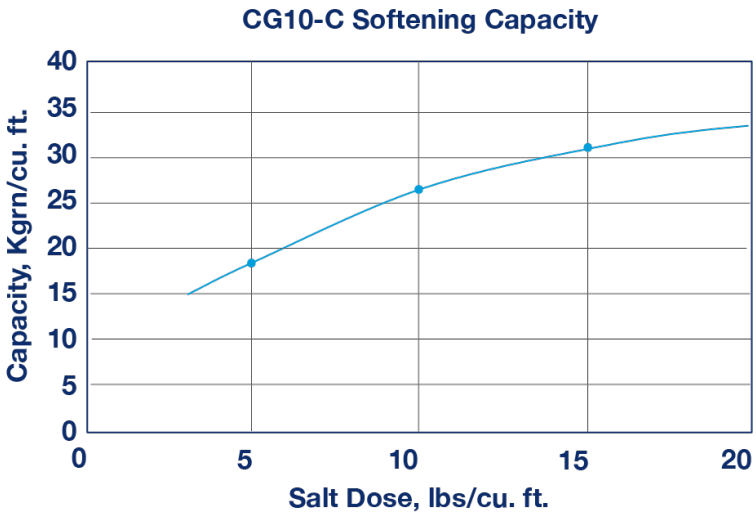
APPLICATION NOTES

HIGH FLOW RATE USE

ResinTech **CG10-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. The rate of exchange of a coarse mesh resin is somewhat slower than standard mesh size resin, therefore the **CG10-C** is intended for polishing rather than bulk ion removal.

SOFTENING

ResinTech **CG10-C** is an 10% crosslinked cation resin optimized for industrial softening applications. CG10-C is suitable for hot water applications and for waters that contain modest levels of chlorine.



Capacity and leakage data are based on 2:1 Ca:Mg ratio, 500 ppm TDS as $CaCO_3$, 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.

DEMINERALIZATION

See ResinTech **CG10-H-C**.

IMPORTANT NOTES

Have a question?

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