

# POLYSTYRENIC GEL 10% CROSSLINKED SODIUM FORM

ResinTech CG10 is a premium grade strong acid cation resin in sodium form. It is amber in color and made from a 10% cross-linked gel. CG10 offers high resistance to physical, thermal, and chemical degradation. It is indicated for all industrial applications where the importance of durability and high capacity outweigh the higher amounts of chemical needed for regeneration compared to lower cross-linked cation resins.

### **APPLICATIONS**

- Softening Industrial
- Demineralization
- Softening High Temperature

TYPICAL PROPERTIES & PHYSICAL CHARACTERISTICS		
Polymer Matrix	Styrenic Gel	
Ionic Form	Sodium	
Fuctional Group	Sulform Acid	
Physical Form	Spherical Beads CON	
Particle Size	16 to 50 US Mash (297 - 1190 µm)	
% < 50 mesh (300μm)	TEAMO	
Ionic Form Fuctional Group Physical Form Particle Size % < 50 mesh (300µm) Minimum Sphericity Uniformity Coefficient Reversible Swelling Temp Limit	93%	
Uniformity Coefficient	1.6	
Reversible Swelling	Na to H 4% to 8%	
Temp Limit	280°F (138°C)	
Capacity (meq/mL)	2.2	
Moisture Retention	39% to 45%	
Shipping Weight	53 - 55 lbs/ft³ (849 - 881 g/L)	
Color	Amber	
Regenerability	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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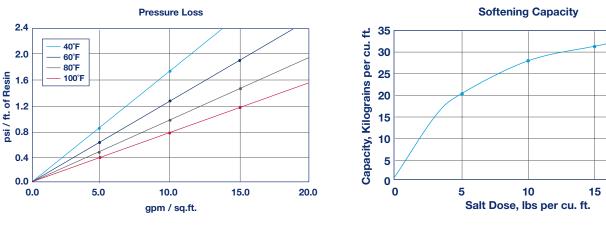
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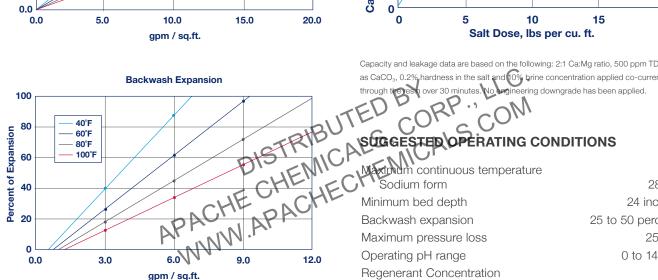


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Capacity and leakage data are based on the following: 2:1 Ca:Mg ratio, 500 ppm TDS as  $CaCO_3$ , 0.2% hardness in the salt and 10% brine concentration applied co-currently



#### **HIGH TEMPERATURE USE**

ResinTech CG10 is suitable for operation at temperatures as high as 280°F. At temperatures above 212°F, dissolved oxygen in the feedwater is a powerful oxidant and can chemically damage the resin. Oxygen levels in the feed should be reduced to less than 0.05 ppm to ensure a reasonable service life of the resin.

**Backwash Expansion** 

Maximum continuous temperature	
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	
Hydrogen cycle	5 to 10 percent HCI
Hydrogen cycle	1 to 8 percent $H_2SO_4$
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





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