PRODUCT SPECIFICATION SHEET



POLYSTYRENIC GEL 8% CROSSLINKED HYDROGEN FORM

ResinTech CG8-H is an amber-colored hydrogen form 8% cross-linked gel strong acid cation resin. It is a workhorse cation resin optimized for industrial applications that require good regeneration efficiency and oxidative stability in a hydrogen form cation resin. CG8-H is intended for use in all industrial applications such as demineralization where a hydrogen form cation resin is required.

APPLICATIONS

- Demineralization
- Cation Component in Mixed Beds

| TYPICAL PROPERTIES & PHYSICAL CHARACTERISTICS | |
|---|----------------------------------|
| Polymer Matrix | Styrenic Gel |
| Ionic Form | Hydrogen |
| Functional Group | Sulfonic Acid |
| Physical Form | Spherical Beads |
| Particle Size | 16 to 50 US Mesh (297 - 1190 μm) |
| % < 50 mesh (300μm) | < 1% |
| Minimum Sphericity | 93% |
| Uniformity Coefficient | 1.6 |
| Reversible Swelling | H to Na -5% to -8% |
| Temp Limit | 265°F (129°C) |
| Capacity (meq/mL) | 1.8 |
| Moisture Retention | 47% to 56% |
| Shipping Weight | 49 - 51 lbs/ft³ (785 - 817 g/L) |
| Color | Amber |
| Regenerability | Yes |

PACKAGING OPTIONS

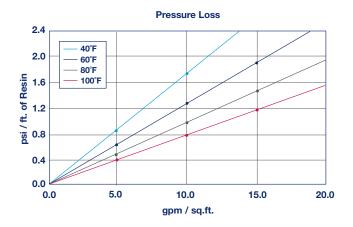
- 1 ft³ bags
- 1 ft³ boxes
- 1 ft³ drums
- 7 ft³ drums
- 42 ft³ supersacks

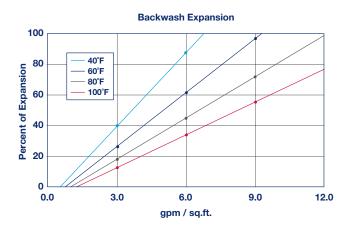






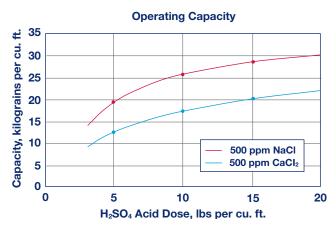
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DEMINERALIZATION

ResinTech CG8-H 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.



Capacity based on 500 ppm of stated salt (as $CaCO_3$) 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 5 to 10 percent HCI Hydrogen cycle 1 to 8 percent H₂S₀₄ Hydrogen cycle 10 to 15 percent NaCl Salt cycle 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.

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

Service flow rate

Revision 1.1
ResinTech, Inc.®



1 to 10 gpm/cu.ft.