

CG10-H

Strong acid cation resin, styrene/DVB 10% crosslinked gel, hydrogen form

ResinTech CG10-H is an amber-colored 10% crosslinked gel strong acid cation resin in the hydrogen form. It has a higher capacity than other hydrogen form cation resins and high resistance to both thermal and chemical oxidation. CG10-H is intended for industrial applications where high capacity and durability are desired in a hydrogen form cation resin. It can be used as the cation component in demineralization along with a hydroxide form anion resin.



FEATURES & BENEFITS

- 10% divinylbenzene
- Low color throw
- Superior physical stability

APPLICATIONS

- Demineralization / DI
- Condensate Polishing
- Mixed Bed Components

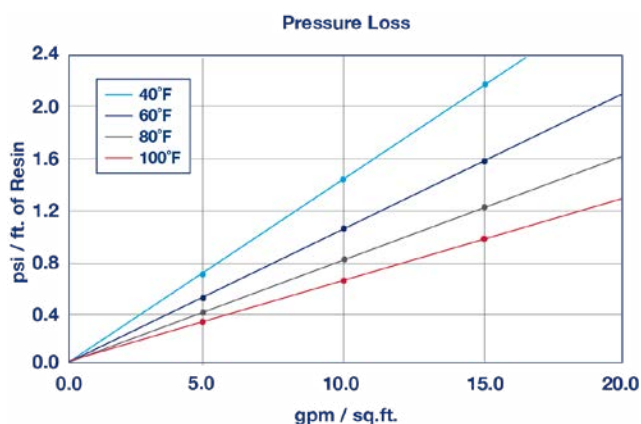


REACH Registered

CG10-H

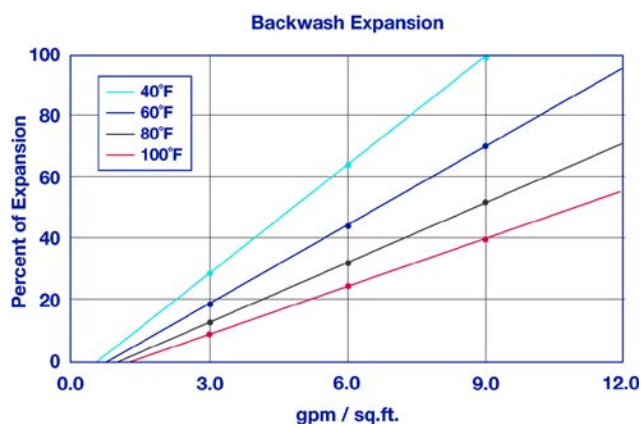
Polymer Matrix	Styrene/DVB	Reversible Swelling	4 to 7% (Na → H)
Polymer Type	Gel	Uniformity	Gaussian
Ionic Form (as shipped)	Hydrogen (H ⁺)	Uniformity Coefficient	1.60
Functional Group	Sulfonic Acid	Capacity (meq/mL)	2.00
Physical Form	Spherical Beads	Moisture Retention (%)	44 to 52
Particle Size US Mesh (µm)	16 (1190) to 50 (297)	Shipping Weight	50 - 52 lbs/cu.ft. (801 - 833 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 CG10-H 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 CG10-H as a function of flow rate at various temperatures.

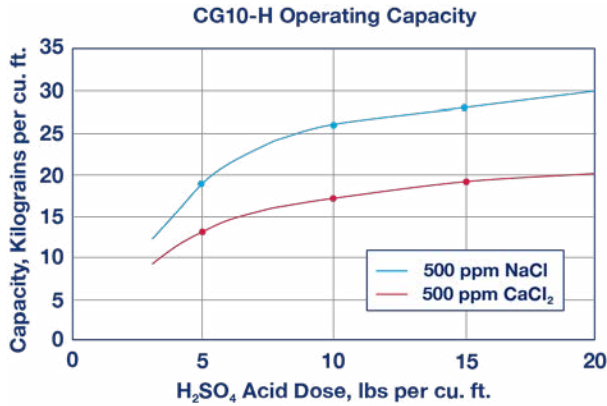
SUGGESTED OPERATING CONDITIONS

Maximum Temperature	265°F (129°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		



DEMINERALIZATION

ResinTech CG10-H can be used as the cation component in a variety of demineralization configurations where a hydrogen form cation resin is coupled with a hydroxide form anion resin. The high density of CG10-H provides ideal separation in regenerable mixed beds. CG10-H has higher total capacity and lower chemical efficiency compared to CG8-H.



Capacity based on 500 ppm of stated salt (as CaCO₃) 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.

REGENERATION DETAILS

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

PACKAGING

Standard

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

Metric

25L Bag | 140L 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](https://www.resintech.com)

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