CG10-H

Grade: Standard

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
- Alodining
- Amine Solutions
- Condensate
- Neutral Water
- Phosphoric Acid
- Potable Water
- Reactor Water
- Wastewater

PHYSICAL PROPERTIES

Polymer Matrix	Styrene/DVB
Polymer Type	Gel
Ionic Form (as shipped)	Hydrogen (H^+)
Functional Group	Sulfonic Acid
Physical Form	Spherical Beads
Uniformity Coefficient	1.60
Particle Size	16-50 US mesh (297-1190µm)
< 50 mesh (300 µm) %	< 1%
Minimum Sphericity (%)	93
Reversible Swelling	4 to 7% (Na → H)
Capacity (meq/mL)	2.00
Moisture Retention (%)	44 to 52
Shipping Weight	50 - 52 lbs/cu.ft. (801 - 833 g/L)
Color	Amber
Regenerable	Regenerable

SUGGESTED OPERATING CONDITIONS

Maximum Temperature	265°F (129°C)
Minimum Bed Depth	24 in. (61.0 cm)
Maximum Pressure Loss	25 psi (172 kPa)
Backwash Expansion (%)	25 to 50
Operating pH Range	0 to 14
Flow Rate	
Working Service	1-10 gpm/cu.ft. (8-80 BV/h)

REACH COMPLIANCE

RESINTECH INC.
INNOVATIONS IN ION EXCHANGE

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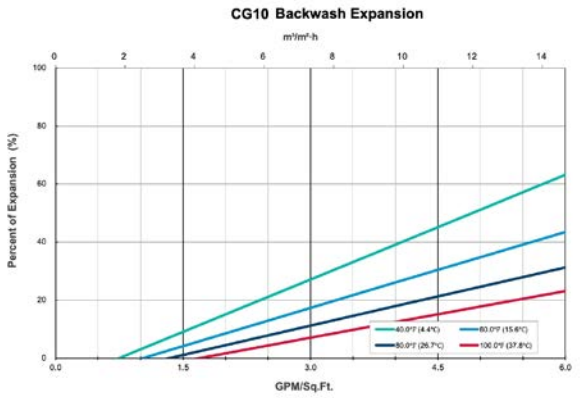
REGENERATION DETAILS

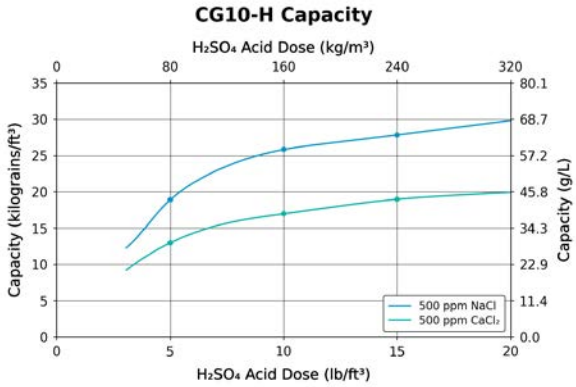
Hydrogen Cycle (H2SO4)	1 to 8%
Hydrogen Cycle (HCl)	5 to 10%
Regenerant Level	4-15 lbs/cu.ft. (64.1-240.3 g/L)
Regenerant Flow Rate	0.5-1.5 gpm/cu.ft. (4-12 BV/h)
Regenerant Contact Time	> 20 minutes
Displacement Flow Rate	Same as dilution water
Displacement Volume	10-15 gals/cu.ft. (1-2 BV)
Rinse Flow Rate	Same as service flow
Rinse Volume	35-60 gals/cu.ft. (5-8 BV)

BACKWASH EXPANSION



The graph above shows the expansion characteristics of ResinTech CG10-H as a function of flow rate at various temperatures.

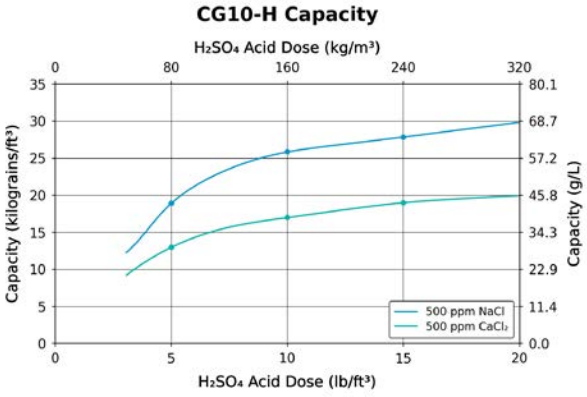
CAPACITY



Capacity and leakage data are based on the following: 2:1 Ca:Mg ratio, 500 ppm TDS as CaCO3, 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

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 $CaCO_3$) 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.

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CERTIFICATIONS

REACH Registered

PACKAGING

Standard

42 cu.ft. Supersack | 7 cu.ft. Drum
1000L Supersack | 200L Drum

Metric

1 cu.ft. Bag | 5 cu.ft. Drum
25L Bag | 140L Drum

Shipping Weight

50 - 52 lbs/cu.ft. (801 - 833 g/L)

MATERIAL SAFETY DATA SHEETS (MSDS)

Material Safety Data Sheets (MSDS) 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

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