CG10-H-UPS

Grade: Standard

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

ResinTech CG10-H-UPS is an amber-colored uniform particle size hydrogen form 10% crosslinked gel strong acid cation resin. The uniform beads and somewhat smaller harmonic mean size yields minimal pressure loss and better regeneration efficiency compared to Gaussian-sized resins. It is intended for use in all industrial applications that require a hydrogen form cation resin and is recommended for countercurrently regenerated systems such as packed beds.

FEATURES & BENEFITS

- 10% divinylbenzene
- Low color throw
- Uniform particle size
- Superior physical stability

APPLICATIONS

- Packed Beds
- Demineralization / DI
- Condensate Polishing
- Ultrapure Water Production (UPW)
- Mixed Bed Components

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	1.25
Effective Particle Size	625 +100 µm
< 50 mesh (300 µm) %	< 0.5%
Minimum Sphericity (%)	95
Reversible Swelling	4 to 8% (Na → H)
Capacity (meq/mL)	2.00
Moisture Retention (%)	46 to 52
Shipping Weight	50 - 52 lbs/cu.ft. (801 - 833 g/L)
Color	Amber to Brown
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

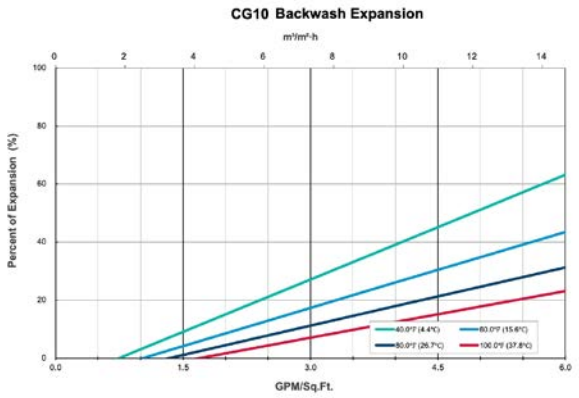
RESINTECH INC.
INNOVATIONS IN ION EXCHANGE

CORPORATE HEADQUARTERS 1801 Federal Street Camden, NJ 08105 USA PHONE 856.768.9600 EMAIL info@resintech.com WEB resintech.com

REGENERATION DETAILS

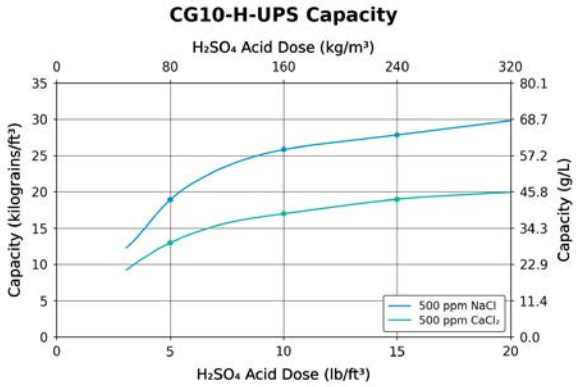
Salt Cycle (NaCl)	10 to 15%	Regenerant Contact Time	> 20 minutes
Hydrogen Cycle (H2SO4)	1 to 8%	Displacement Flow Rate	Same as dilution water
Hydrogen Cycle (HCl)	5 to 10%	Displacement Volume	10-15 gals/cu.ft. (1-2 BV)
Regenerant Level	4-15 lbs/cu.ft. (64.1-240.3 g/L)	Rinse Flow Rate	Same as service flow
Regenerant Flow Rate	0.5-1.5 gpm/cu.ft. (4-12 BV/h)	Rinse Volume	Minimum of 30 gals/cu.ft. (4 BV)

BACKWASH EXPANSION



The graph above shows the expansion characteristics of ResinTech CG10-H-UPS 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-UPS** 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-UPS** provides ideal separation from anion resin during mixed bed regeneration. **CG10-H-UPS** has higher total capacity and slightly lower chemical efficiency compared to **CG8-H-UPS**.

RESINTECH® INC.
INNOVATIONS IN ION EXCHANGE

CORPORATE HEADQUARTERS 1801 Federal Street Camden, NJ 08105 USA PHONE 856.768.9600 EMAIL info@resintech.com WEB resintech.com

CERTIFICATIONS

REACH Registered

PACKAGING

Standard

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

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

RESIN TECH® INC.
INNOVATIONS IN ION EXCHANGE

CORPORATE HEADQUARTERS 1801 Federal Street Camden, NJ 08105 USA PHONE 856.768.9600 EMAIL info@resintech.com WEB resintech.com