CGS

Grade: Standard

Strong acid cation resin, standard crosslink polystyrenic gel, softening grade, sodium form

ResinTech CGS is a residential grade strong acid cation resin in sodium form. It is amber in color and made from standard crosslinked gel. CGS is Gold Seal Certified by the WQA for potable water applications. It is optimized for regeneration efficiency and high capacity. CGS is intended for residential water softening of waters that do not contain significant chlorine residual and where potable water certification is required.

FEATURES & BENEFITS

- Residential softening applications
- Low color throw
- Superior physical stability
- Complies with US FDA regulations

APPLICATIONS

- Softening
- Alodining
- Brackish
- Chloride Brines
- Phosphoric Acid
- Plating Baths Purification
- Potable Water
- Produced Water
- Wastewater

PHYSICAL PROPERTIES

Polymer Matrix	Styrene/DVB
Polymer Type	Gel
Ionic Form (as shipped)	Sodium (Na^+)
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 (%)	90
Capacity (meq/mL)	1.80
Moisture Retention (%)	40 to 52
Shipping Weight	49 - 51 lbs/cu.ft. (785 - 817 g/L)
Color	Amber
Regenerable	Regenerable

SUGGESTED OPERATING CONDITIONS

Maximum Temperature	250°F (121°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)

Conforms to §21CFR173.25 of the USFDA Food Additives Regulations

RESINTECH INC.
INNOVATIONS IN ION EXCHANGE

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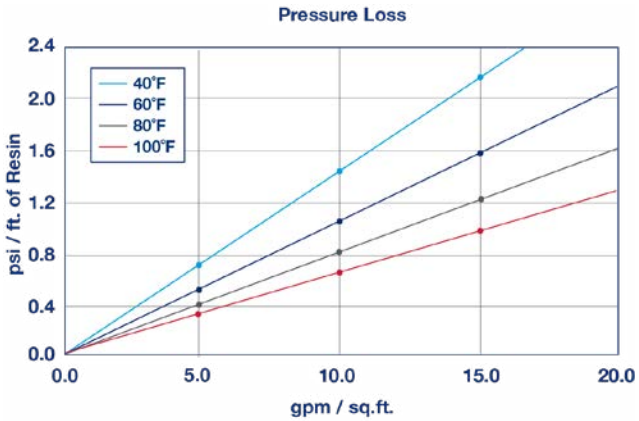
REGENERATION DETAILS

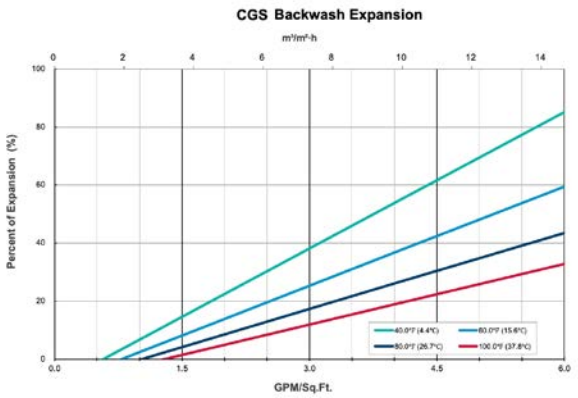
Salt Cycle (NaCl)	10 to 15%	Displacement Flow Rate	Same as dilution water
Regenerant Level	4-15 lbs/cu.ft. (64.1-240.3 g/L)	Displacement Volume	10-15 gals/cu.ft. (1-2 BV)
Regenerant Flow Rate	0.5-1.5 gpm/cu.ft. (4-12 BV/h)	Rinse Flow Rate	Same as service flow
Regenerant Contact Time	> 20 minutes	Rinse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

PRESSURE LOSS



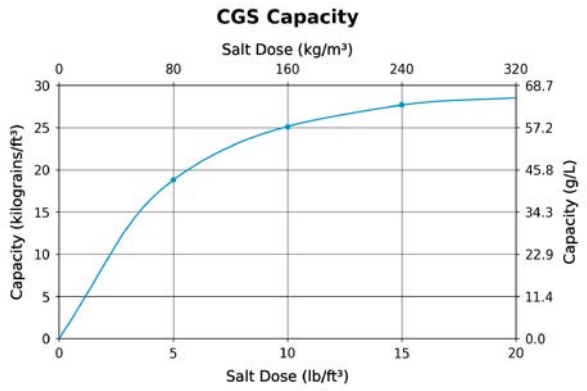
The graph above shows the expected pressure loss of ResinTech CGS per foot of bed depth as a function of flow rate at various temperatures.

BACKWASH EXPANSION



The graph above shows the expansion characteristics of ResinTech CGS 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.

SOFTENING

ResinTech **CGS** is a standard crosslinked cation resin optimized for residential and commercial applications. This type of resin is easier to regenerate than the higher crosslinked resins. **CGS** has marginal resistance to chlorine and other oxidants and is not ideal for high temperature and other high stress applications.

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CERTIFICATIONS

Meets NSF/ANSI/CAN42
Meets NSF/ANSI/CAN 44
Meets NSF/ANSI/CAN 61
Meets NSF/ANSI/CAN42

REACH Registered
Kosher Certified
Halal Certified

PACKAGING

Standard

1 cu.ft. Bag | 42 cu.ft. Supersack
25L Bag | 1000L Supersack

Metric

5 cu.ft. Drum | 7 cu.ft. Drum
140L Drum | 200L Drum

Shipping Weight

49 - 51 lbs/cu.ft. (785 - 817 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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