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CG8-K

Strong Acid Cation Resin, Polystyrenic Gel crosslinked with 8% Divinylbenzene, Potassium Form

Features & Benefits

- POTASSIUM FORM
- LOW COLOR THROW
- SUPERIOR PHYSICAL STABILITY
- COMPLIES WITH US FDA REGULATIONS

DESCRIPTION

ResinTech CG8-K is an amber-colored 8% crosslinked gel strong acid cation resin in the potassium form. It has a capacity and other characteristics similar to other products in the CG8 family. CG8-K can be used interchangeably with sodium form CG8. It is intended for use in water softening and other neutral salt cation exchange applications where the release of sodium ions is undesirable.

PHYSICAL PROPERTIES

Polymer Matrix	Styrene/DVB
Polymer Type	Gel
Functional Group	Sulfonic Acid
Ionic Form (as shipped)	Potassium (K)
Physical Form	Spherical Beads
Capacity (meq/mL)	2.00
Moisture Retention (%)	35 to 45
Shipping Weight	50 lbs/cu.ft. (~801 g/L)
Reversible Swelling (%)	3 to 5 (K → Na)
Particle Size	US Mesh (µm): 16 (1190) to 40 (400)
< 50 mesh (300 µm) (%)	< 1%

Minimum Sphericity (%)	93
Uniformity Coefficient	1.40
Color	Amber

CERTIFICATIONS

REACH Registered	Yes
Satisfies USFDA Regulations ¶21CFR173.25	Yes

STANDARD PACKAGING

42 cu.ft. Supersack | 7 cu.ft. Drum

200L Drum | 1000L Supersack

OPTIONAL PACKAGING

5 cu.ft. Drum | 7 cu.ft. Drum

140L Drum | 200L Drum

TARGET CONTAMINANTS

Calcium | Magnesium | Sodium | Iron | Manganese

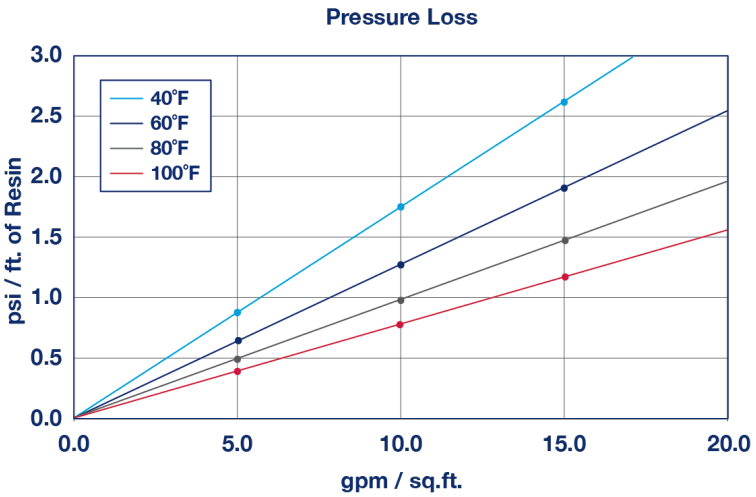
PRIMARY APPLICATIONS

Softening - Residential | Sodium Reduction

OPERATING CONDITIONS

Maximum Continuous Temperature	280°F (138°C)
Bed Depth	24 in. (61.0 cm)
Backwash Expansion	25 to 50%
Maximum Pressure Loss	25 psi (172.38 kPa)
Operating pH Range	0 to 14

PRESSURE LOSS



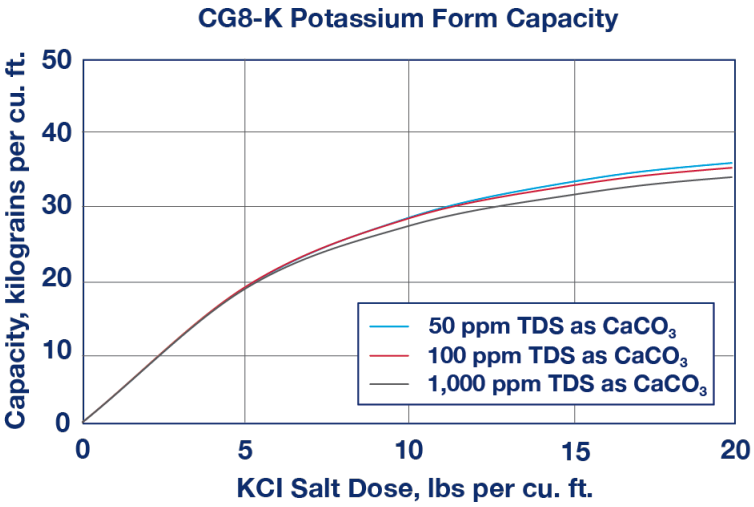
REGENERATION DETAILS

Service Flow Rate	1 - 10 gpm/cu.ft. (8 - 80 BV/h)
Salt Cycle (NaCl) Concentration	10 to 15% KCl
Regeneration Level	4 - 15 lbs/cu.ft. (64.1 - 240.3 g/L)
Regeneration 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 to 15 gals/cu.ft. (1 to 2 BV)
Rinse Flow Rate	Same as service flow
Rinse Volume	35.0 - 60.0 gals/cu.ft. (5 - 8 BV)

APPLICATION NOTES

POTASSIUM FORM SOFTENING

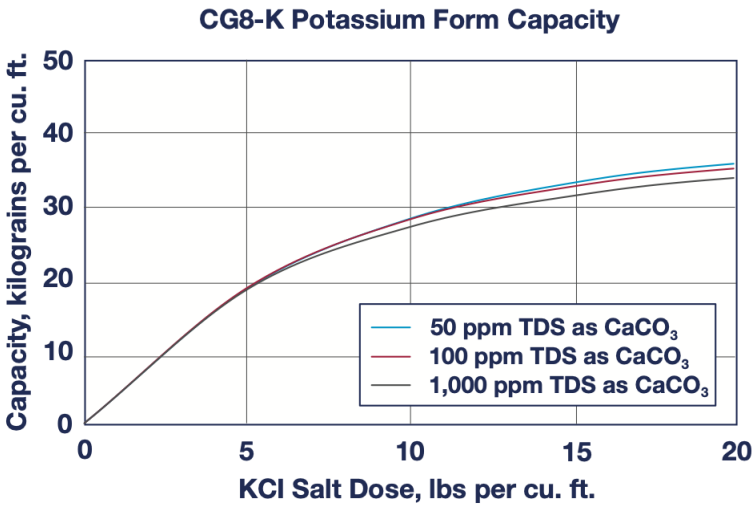
ResinTech **CG8-K** is supplied in the potassium rather than the sodium form. Potassium form resins are regenerated with potassium chloride rather than sodium chloride. **CG8-K** produces softened water with reduced sodium content. Except for the use of a different salt, the capacity and other operating characteristics are virtually identical to sodium form softening.



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.

SODIUM REMOVAL

Potassium form resins such as ResinTech **CG8-K** have substantial capacity to remove sodium as well as hardness. The resin prefers hardness over sodium so it is possible to dump sodium if the resin is operated past sodium breakthrough.



IMPORTANT NOTES

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Current safety data sheets are available at www.resintech.com/sds.

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CAUTION: Do not mix ion exchange products with strong oxidizing agents. Nitric acid and other strong oxidizing agents can cause explosive reactions when mixed with organic materials, such as ion exchange resins.

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