CG10-BL

Grade: Standard

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

ResinTech CG10-BL is a high-purity premium grade strong acid cation resin in the sodium form. It is dark brown in color and made from a 10% crosslinked gel. CG10-BL has the same high resistance to physical, thermal, and chemical degradation as other resins in the CG10 family. It is intended for industrial applications where the need for durability and high capacity outweigh the higher amounts of chemical needed for regeneration compared to lower crosslinked cation resins.

FEATURES & BENEFITS

- 10% divinylbenzene
- Low color throw
- Superior physical stability
- Complies with US FDA regulations

APPLICATIONS

- High Temperature Applications
- Condensate Polishing
- Softening

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 (%)	93
Reversible Swelling	4 to 8% (Na → H)
Capacity (meq/mL)	0.00
Moisture Retention (%)	39% to 45%
Shipping Weight	53 - 55 lbs/cu.ft. (849 - 881 g/L)
Color	Dark Brown to Black
Regenerable	Regenerable

SUGGESTED OPERATING CONDITIONS

Maximum Temperature	280°F (138°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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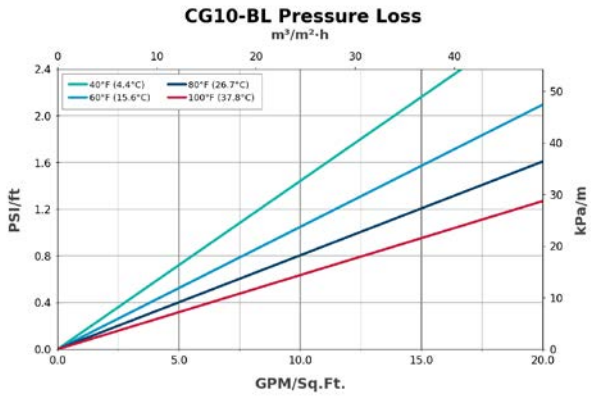
REGENERATION DETAILS

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

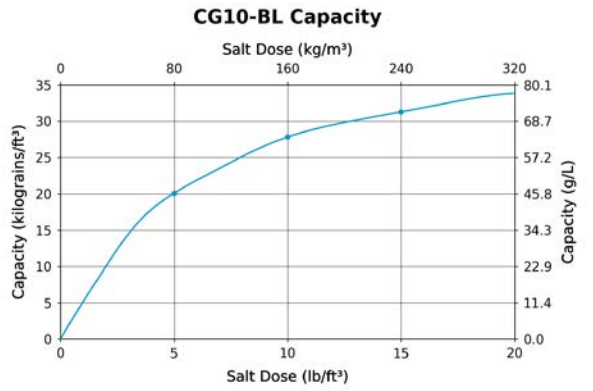


The graph above shows the expected pressure loss of ResinTech CG10-BL per foot of bed depth as a function of flow rate at various temperatures.

BACKWASH EXPANSION

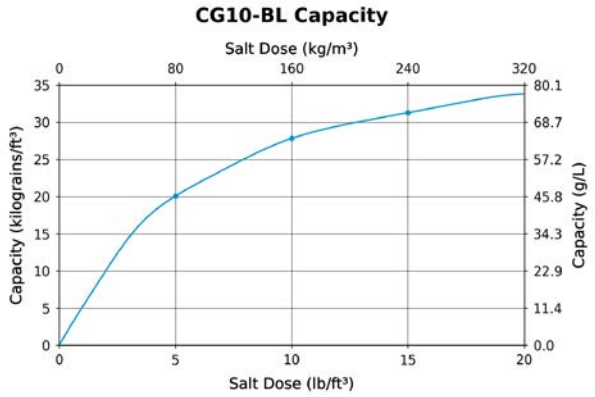
The graph above shows the expansion characteristics of ResinTech CG10-BL as a function of flow rate at various temperatures.

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



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HIGH TEMPERATURE USE

ResinTech **CG10-BL** is suitable for operation at temperatures as high as 280 °F. At temperatures above 212°F, dissolved oxygen in the feed water is a powerful oxidant and can chemically damage the resin. Oxygen levels in the feed should be reduced to less than 0.05 ppm to ensure a reasonable service life of the resin.

CERTIFICATIONS

Meets NSF/ANSI/CAN 61

Meets NSF/ANSI/CAN 372

REACH Registered

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

53 - 55 lbs/cu.ft. (849 - 881 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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