# **PRODUCT SPECIFICATION SHEET**



COARSE MESH
TYPE I ANION
POLYSTYRENIC GEL
CHLORIDE FORM

ResinTech SBG1-C is a coarse grade chloride form type 1 gel strong base anion resin. It has similar physical and chemical properties as other resins in the SBG1 family. SBG1-C is intended for use in industrial applications where minimizing pressure loss is essential even when suspended solids may be present.

## **APPLICATIONS**

- Polishing High Flow Rate
- Mining Applications

TYPICAL PROPERTIES & PHYSICAL CHARACTERISTICS	
Polymer Matrix	Styrenic Gel
Ionic Form	Chloride
Functional Group	Trimethylamine
Physical Form	Spherical Beads
Particle Size	16 to 30 US Mesh (595 - 1190 μm)
% < 50 mesh (300μm)	< 1%
Minimum Sphericity	93%
Uniformity Coefficient	1.3
Reversible Swelling	CI to OH 18% to 25%
Temp Limit	170°F (77°C)
Capacity (meq/mL)	1.4
Moisture Retention	42% to 51%
Shipping Weight	43 - 45 lbs/ft³ (689 - 721 g/L)
Color	White to Yellow
Regenerability	Yes

# **PACKAGING OPTIONS**

- 1 ft³ bags
- 1 ft<sup>3</sup> boxes
- 1 ft<sup>3</sup> drums
- 7 ft<sup>3</sup> drums
- 42 ft³ supersacks

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#### **Pressure Loss** 3.0 40°F 2.5 60°F 80°F psi / ft. of Resin 2.0 100°F 1.5 1.0 0.5 0.0 5.0 10.0 15.0 20.0 0.0 gpm / sq.ft.



## **HIGH FLOW RATE USE**

ResinTech SBG1-C is made with a large bead size which increases the void spaces between the beads and reduces the surface area, thus reducing the resistance to water flow through the resin bed. Because the resin bed has lower pressure loss the resin can operate at high flow rates. High flow rates are useful in polishing applications where a large resin volume is not needed to provide a long throughput between regenerations. It should be understood that the rate of exchange is somewhat slower due to the large bead size and that SBG1-C is intended for polishing rather than bulk ion removal.

### SUGGESTED OPERATING CONDITIONS

Maximum continuous temperature 170°F Chloride form 24 inches Minimum bed depth Backwash expansion 25 to 50 percent Maximum pressure loss 20 psi Operating pH range 0 to 14 SU Regenerant Concentration 2 to 10 percent NaCl Salt cycle Regenerant level 4 to 15 lbs./cu.ft. 0.25 to 1.0 gpm/cu.ft. Regenerant flow rate Regenerant contact time >40 minutes Displacement flow rate Same as dilution water Displacement volume 10 to 15 gallons/cu.ft. Rinse flow rate Same as service flow Rinse volume 35 to 60 gallons/cu.ft. Service flow rate 1 to 10 gpm/cu.ft.

Note: These guidelines describe average low risk operating conditions. They are not intended to be absolute minimums or maximums.

For operation outside these guidelines, contact ResinTech Technical Support

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