

## MAGNA SBG2-HP

STRONG BASE ANION

**HIGH-PURITY GRADE  
TYPE II ANION  
POLYSTYRENIC GEL  
CHLORIDE FORM**

ResinTech SBG2-HP is a high purity chloride form type 2 gel strong base anion resin. The HP (high purity) designation means it is Gold Seal Certified by the WQA for use in potable water applications. The amine used in type 2 anion resins makes them less prone to taste and odor than type 1 resins. SBG2-HP is intended for potable water use for the removal of contaminants such as nitrate, arsenate, chromate, uranium, etc.

### APPLICATIONS

- Trace Contaminants  
(U, Cr, As, Se, F, ClO<sub>4</sub>, ClO<sub>3</sub>)
- Chromate Removal



**NOTE:** NSF/ANSI-61 compliance requires conditioning with a minimum 20 bed volume rinse prior to first use.

| TYPICAL PROPERTIES & PHYSICAL CHARACTERISTICS |                                             |
|-----------------------------------------------|---------------------------------------------|
| <b>Polymer Matrix</b>                         | Styrenic Gel                                |
| <b>Ionic Form</b>                             | Chloride                                    |
| <b>Functional Group</b>                       | Dimethylethanolamine                        |
| <b>Physical Form</b>                          | Spherical Beads                             |
| <b>Particle Size</b>                          | 16 to 50 US Mesh (297 - 1190 µm)            |
| <b>% &lt; 50 mesh (300µm)</b>                 | < 1%                                        |
| <b>Minimum Sphericity</b>                     | 93%                                         |
| <b>Uniformity Coefficient</b>                 | 1.6                                         |
| <b>Reversible Swelling</b>                    | Cl to OH 12% to 15%                         |
| <b>Temp Limit</b>                             | 170°F (77°C)                                |
| <b>Capacity (meq/mL)</b>                      | 1.4                                         |
| <b>Moisture Retention</b>                     | 36% to 45%                                  |
| <b>Shipping Weight</b>                        | 43 - 45 lbs/ft <sup>3</sup> (689 - 721 g/L) |
| <b>Color</b>                                  | White to Yellow                             |
| <b>Regenerability</b>                         | Yes                                         |

### CERTIFICATIONS

- WQA Gold Seal\*
- Kosher Certified
- FDA Compliance\*\*

\* NSF/ANSI/CAN 61: Drinking Water System Components - Health Effects

\*\* Paragraph 21CFR173.25 of the Food Additives Regulations of the US FDA

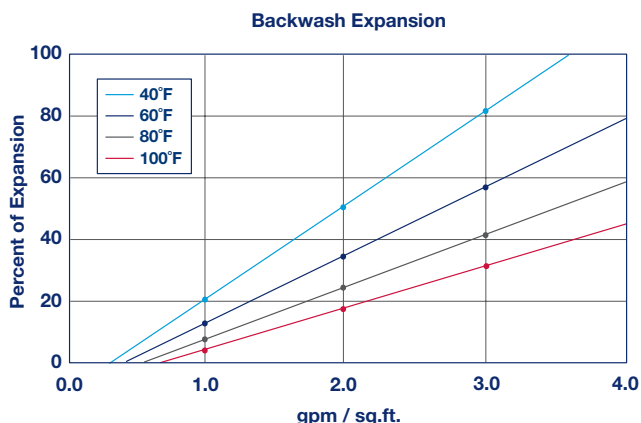
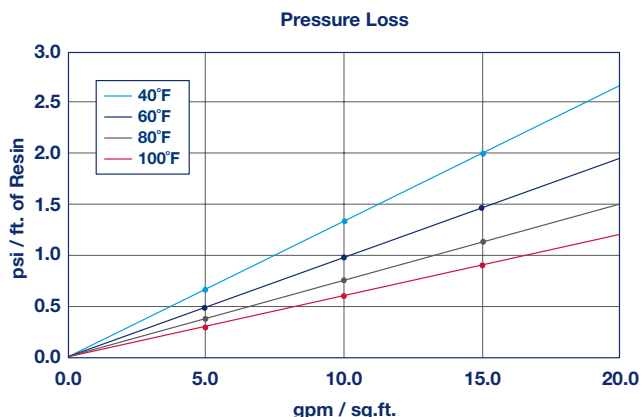
### PACKAGING OPTIONS

- 500 ml samples
- 1 ft<sup>3</sup> bags
- 1 ft<sup>3</sup> boxes
- 1 ft<sup>3</sup> drums
- 7 ft<sup>3</sup> drums
- 42 ft<sup>3</sup> supersacks

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### TRACE CONTAMINANT REMOVAL (U, Cr, As, Se, ClO<sub>4</sub>)

ResinTech SBG2-HP has high capacity and can be used to remove a variety of trace contaminants, even when that contaminant is not highly preferred compared to the other bulk ions in the feedwater. Useful capacities are obtained when the feedwater TDS is substantially less than the resin's internal TDS. Uranium, chromate, and perchlorate are particularly well removed. Arsenate and selenate are well removed but can be chromatographically displaced by sulfate and other ions.

### NITRATE REMOVAL

ResinTech SBG2-HP can be used in the chloride cycle to reduce nitrates along with sulfates. Regeneration is accomplished with sodium chloride brine, in a fashion similar to water softeners. Although high operating capacities and high salt efficiency can be obtained, there is also the possibility of nitrate dumping. Use of chloride form anion resin reduces pH during the early portion of the exhaustion cycle. When treating waters with high hardness the brine dilution and displacement waters should be softened and a low hardness salt used to prevent scaling during regeneration.

### SUGGESTED OPERATING CONDITIONS

|                                |                         |
|--------------------------------|-------------------------|
| Maximum continuous temperature | 170°F                   |
| Chloride form                  |                         |
| Minimum bed depth              | 24 inches               |
| Backwash expansion             | 25 to 50 percent        |
| Maximum pressure loss          | 20 psi                  |
| Operating pH range             | 0 to 14 SU              |
| Regenerant Concentration       |                         |
| Hydroxide cycle                | 2 to 6 percent NaOH     |
| Salt cycle                     | 2 to 10 percent NaCl    |
| Regenerant level               | 4 to 10 lbs./cu.ft.     |
| Regenerant flow rate           | 0.25 to 1.0 gpm/cu.ft.  |
| 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