

SBG1-HP

Strong base type 1 anion resin, styrene/DVB gel, high purity, chloride form

ResinTech SBG1 is a high purity type 1 gel strong base anion resin in chloride form. Its 'HP' designation means it is Gold Seal Certified by the WQA for use in potable water applications. It has similar chemical and physical properties as other resins in the SBG1 family and is intended for use to remove contaminants such as nitrate, arsenate, chromate, uranium, and for other salt form applications that require potable water certification.



FEATURES & BENEFITS

- High total capacity for long run lengths
- Lower TOC leach rate
- Superior physical stability
- Controlled particle size
- Low pressure drop & better kinetics
- Complies with US FDA regulations

APPLICATIONS

- Dealkalizer
- Demineralization / DI
- Trace Contaminant Removal

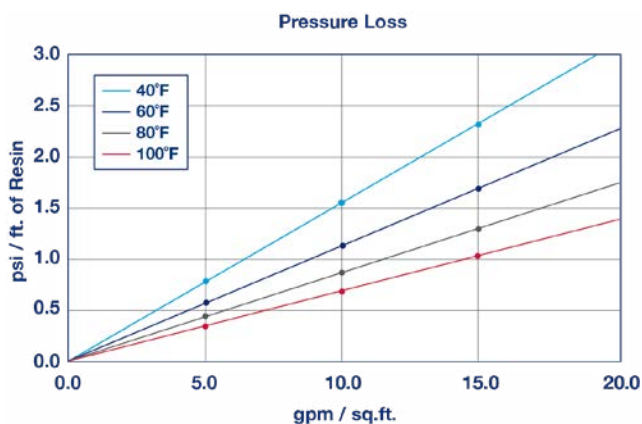


Meets NSF/ANSI/CAN 61
 Meets NSF/ANSI/CAN 372
 REACH Registered
 Kosher Certified
 Halal Certified
 Conforms to §21CFR173.25 of the USFDA Food Additives Regulations

SBG1-HP

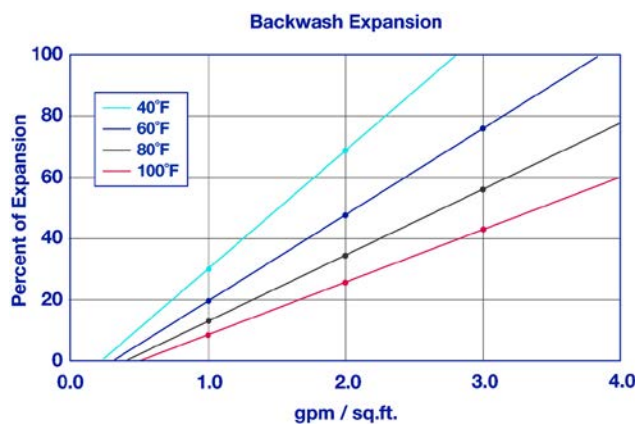
Polymer Matrix	Styrene/DVB	Minimum Sphericity (%)	93
Polymer Type	Gel	Reversible Swelling	18 to 25% (Cl → OH)
Ionic Form (as shipped)	Chloride (Cl ⁻)	Uniformity	Gaussian
Functional Group	Trimethylamine	Uniformity Coefficient	1.60
Physical Form	Spherical Beads	Capacity (meq/mL)	1.00
Particle Size US Mesh (μm)	16 (1190) to 50 (297)	Moisture Retention (%)	42 to 51
< 50 mesh (300 μm) %	< 1%	Shipping Weight	42 - 44 lbs/cu.ft. (673 - 705 g/L)
		Color	White To Amber

PRESSURE LOSS



The graph above shows the expected pressure loss of ResinTech SBG1-HP 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 SBG1-HP as a function of flow rate at various temperatures.

SUGGESTED OPERATING CONDITIONS

Maximum Temperature	170°F (77°C)	Operating pH Range	5.8 to 7.5
Maximum Pressure Loss	20 psi (138 kPa)	Flow Rate	
Backwash Expansion (%)	25 - 50	Working Service	1-10 gpm/cu.ft. (8-80 BV/h)



TRACE CONTAMINANT REMOVAL (U, Cr, As, Se, ClO₄)
 ResinTech **SBG1-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 feed water. Useful capacities are obtained when the feed water 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 **SBG1-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.

SULFATE REMOVAL
 High capacity resins such as ResinTech **SBG1-HP** have high affinity for divalent anions such as sulfate, provided the feed water TDS is not greater than about 5,000 ppm. At higher TDS the resin loses its affinity for sulfate and begins to prefer chloride. Regeneration is accomplished with sodium chloride brine in a fashion similar to a water softener.

DEMINERALIZATION
 See ResinTech **SBG1-OH**.

REGENERATION DETAILS

Salt Cycle (NaCl)	2% to 10%	Displacement Volume	10-15 gals/cu.ft. (1-2 BV)
Displacement Flow Rate	Same as dilution water		

PACKAGING

Standard
 42 cu.ft. Supersack | 7 cu.ft. Drum
 1 cu.ft. Bag | 5 cu.ft. Drum

Metric
 25L Bag | 140L Drum



SAFETY DATA SHEETS (SDS)

Safety Data Sheets (SDS) 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](https://www.resintech.com)

Page 4 of 4

Last Update: 17-Apr-26

