

# SBG1-HCO3

## Strong base type 1 anion resin, styrene/DVB gel, bicarbonate form

ResinTech SBG1-HCO3 is a bicarbonate form type 1 gel strong base anion resin. SBG1-HCO3 is intended for use in salt form strong base anion applications where an initial pH drop is undesirable or where release of chlorides is objectionable. ResinTech SBG1-HCO3 is supplied in the bicarbonate form.



### FEATURES & BENEFITS

- Supplied in the bicarbonate form
- High total capacity
- Superior physical stability
- Controlled particle size

### APPLICATIONS

- pH Correction of Acidic Waters
- Acid Adsorption
- Trace Contaminant Removal
- Sulfate Removal
- Chloride Removal



Meets NSF/ANSI/CAN 61  
Meets NSF/ANSI/CAN 372

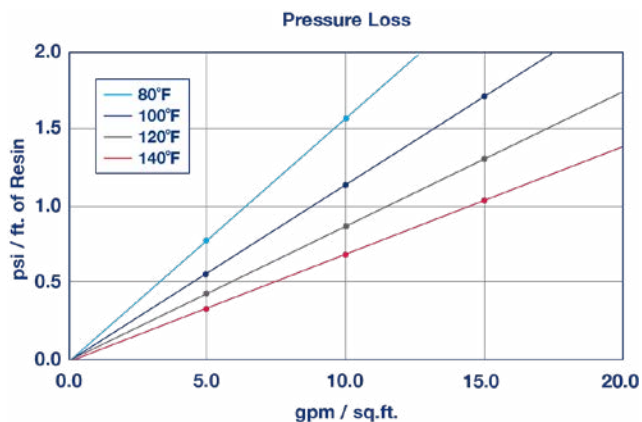
REACH Registered

Conforms to §21CFR173.25 of the USFDA Food Additives Regulations

SBG1-HCO3

|                            |                                 |                        |                                    |
|----------------------------|---------------------------------|------------------------|------------------------------------|
| Polymer Matrix             | Styrene/DVB                     | Reversible Swelling    | 42 to 51% (HCO <sub>3</sub> → OH)  |
| Polymer Type               | Gel                             | Uniformity             | Gaussian                           |
| Ionic Form (as shipped)    | Bicarbonate (HCO <sub>3</sub> ) | Uniformity Coefficient | 1.60                               |
| Functional Group           | Trimethylamine                  | Capacity (meq/mL)      | 1.40                               |
| Physical Form              | Spherical Beads                 | Moisture Retention (%) | 42 to 51                           |
| Particle Size US Mesh (µm) | 16 (1190) to 50 (297)           | Shipping Weight        | 43 - 45 lbs/cu.ft. (689 - 721 g/L) |
| < 50 mesh (300 µm) %       | < 1%                            | Color                  | White To Amber                     |
| Minimum Sphericity (%)     | 93                              |                        |                                    |

**PRESSURE LOSS**



The graph above shows the expected pressure loss of ResinTech SBG1-HCO3 per foot of bed depth as a function of flow rate at various temperatures.

**SUGGESTED OPERATING CONDITIONS**

|                        |                  |                    |                             |
|------------------------|------------------|--------------------|-----------------------------|
| Maximum Temperature    | 170°F (77°C)     | Operating pH Range | 0 to 14                     |
| 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-HCO3** 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 resins 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. Use of bicarbonate form resin helps prevent a pH drop caused by the dealkalization properties of the resin when provided in the chloride form.

**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

Minimum Order Volume: 210 (cu.ft.)

**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](http://resintech.com)

