SBG1P-UPS

Grade: Standard

Strong base type 1 anion resin, styrene/DVB gel, uniform particle size, chloride form

ResinTech SBG1P-UPS is a uniform particle size, type 1 gel strong base anion resin in the chloride form. Its higher moisture content and lower ion exchange density result in better chemical efficiency and improved resistance to fouling. SBG1P-UPS is intended for use in industrial applications where the resin is regenerated and reused over and over again and can be regenerated into the hydroxide form and used in various demineralizer configurations.

FEATURES & BENEFITS

- Uniform particle size
- Organic fouling resistance
- Superior physical stability

APPLICATIONS

- Dealkalizer
- Demineralization / DI
- Trace Contaminant Removal

PHYSICAL PROPERTIES

Polymer Matrix	Styrene/DVB
Polymer Type	Gel
Ionic Form (as shipped)	Chloride (Cl^-)
Functional Group	Trimethylamine
Physical Form	Spherical Beads
Uniformity Coefficient	1.25
Effective Particle Size	625 +100 µm
< 50 mesh (300 µm) %	<0.5%
Minimum Sphericity (%)	95
Reversible Swelling	18 to 25% (Cl → OH)
Capacity (meq/mL)	1.30
Moisture Retention (%)	52 to 58
Shipping Weight	42 - 44 lbs/cu.ft. (673 - 705 g/L)
Color	White To Amber

SUGGESTED OPERATING CONDITIONS

Maximum Temperature	170°F (77°C)
Maximum Pressure Loss	20 psi (138 kPa)
Backwash Expansion (%)	25 - 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

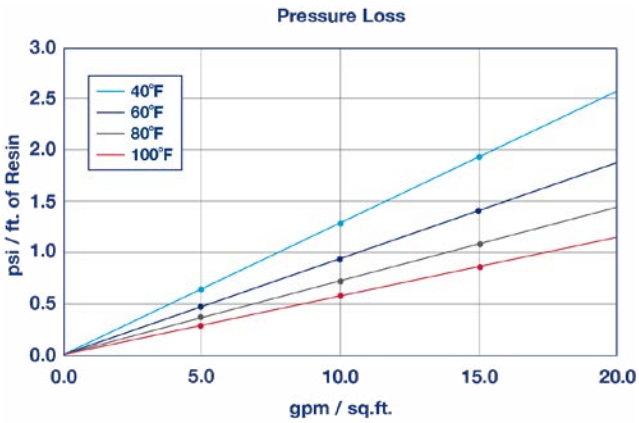
RESINTECH® INC.
INNOVATIONS IN ION EXCHANGE

CORPORATE HEADQUARTERS 1801 Federal Street Camden, NJ 08105 USA PHONE 856.768.9600 EMAIL info@resintech.com WEB resintech.com

REGENERATION DETAILS

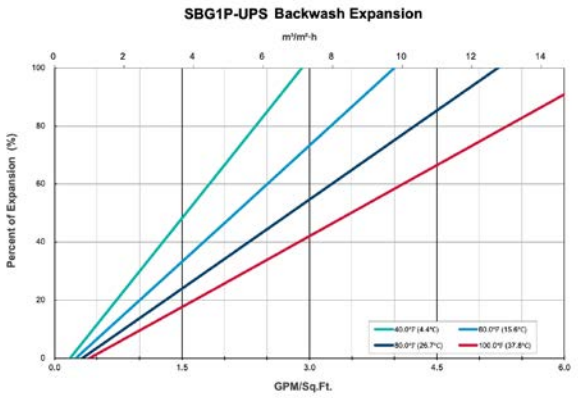
Salt Cycle (NaCl)	2% - 10%	Displacement Volume	10-15 gals/cu.ft. (1-2 BV)
Displacement Flow Rate	Same as dilution water	Rinse Volume	Minimum of 30 gals/cu.ft. (4 BV)

PRESSURE LOSS



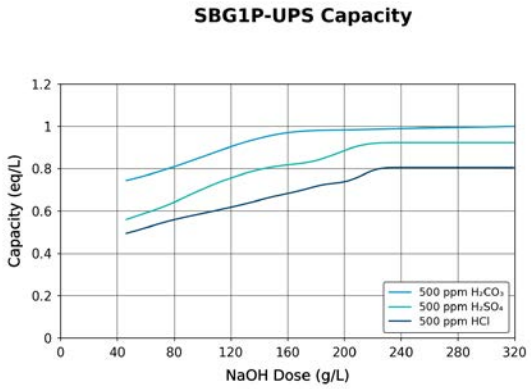
The graph above shows the expected pressure loss of ResinTech SBG1P-UPS per foot of bed depth as a function of flow rate at various temperatures.

BACKWASH EXPANSION



The graph above shows the expansion characteristics of ResinTech SBG1P-UPS 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.

PACKED BEDS

ResinTech **SBG1P-UPS** has a very narrow particle size range. The uniformity allow for a slightly smaller bead size to be used which results in faster exchange of ions, more efficient regeneration, and lower leakage. **SBG1P-UPS** is ideal for packed beds and other types of countercurrent ion exchangers where consistent operation is important cycle after cyles. Higher void space and minimal fine mesh beads provide low pressure loss and help prevent channeling and other distribution problems. Packed beds typically have limited freeboard (only a few inches with the resin in the swollen form).

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LAYERED BEDS

ResinTech **SBG1P-UPS** has a very narrow particle size range. The uniformity and absence of very small beads makes **SBG1P-UPS** ideal for layered beds where it is important that the two resin layers stay separate from each other. For layered bed applications **SBG1P-UPS** should be paired with WBMP-UPS. The strong base layer is usually about 70% of the total bed volume. Layered beds are normally countercurrently regenerated.

CERTIFICATIONS

Meets NSF/ANSI/CAN 61

Meets NSF/ANSI/CAN 372

REACH Registered

PACKAGING

Standard

42 cu.ft. Supersack | 7 cu.ft. Drum
200L Drum | 1000L Supersack

Metric

1 cu.ft. Bag | 5 cu.ft. Drum
25L Bag | 140L Drum

Shipping Weight

42 - 44 lbs/cu.ft. (673 - 705 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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CORPORATE HEADQUARTERS 1801 Federal Street Camden, NJ 08105 USA PHONE 856.768.9600 EMAIL info@resintech.com WEB resintech.com