ResinTech SBACR is a chloride form type 1 acrylic gel strong base anion resin. SBACR has an aliphatic chemical structure that is elastic and open allows organic ions to move in and out of the resin easily. ResinTech SBACR is intended for use in the chloride form as an organic trap and for use in the hydroxide form for demineralizers that have a high level of organics in the feedwater. SBACR is available in the chloride form or can be special ordered in the hydroxide form (when ordered as SBACR-OH).

FEATURES & BENEFITS

• **HIGH CAPACITY FOR ORGANICS**
  Provides rapid removal and elution of organics and low fouling in surface waters

• **EXCELLENT REGENERATION EFFICIENCY**
  Superior kinetics and low chloride selectivity yields high regeneration efficiency

• **SUPERIOR PHYSICAL STABILITY**
  93% plus sphericity and high crush strengths together with carefully controlled particle distribution provides long life and low pressure drop

• **CONTROLLED PARTICLE SIZE**
  16 to 50 mesh size provides a low pressure drop and superior kinetics

• **COMPLIES WITH US FDA REGULATIONS**
  Conforms to paragraph 21CFR173.25 of the Food Additives Regulations of the US FDA

Prior to first use for potable water, resin should be backwashed for a minimum of 20 minutes, followed by 10 bed volumes of downflow rinse.

HYDRAULIC PROPERTIES

PRESSURE LOSS
The graph above shows the expected pressure loss of ResinTech SBACR per foot of bed depth as a function of flow rate at various temperatures.

BACKWASH
The graph above shows the expansion characteristics of ResinTech SBACR as a function of flow rate at various temperatures.
SUGGESTED OPERATING CONDITIONS

Maximum continuous temperature
Hydroxide form 95°F
Chloride form 150°F
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 15 lbs./cu.ft.
Regenerant flow rate >60 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
Average Flow 1 to 4 gpm/cu.ft.
Peak Flow <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.

ORGANIC TRAP
ResinTech SBACR has excellent capacity for tannins and other naturally occurring organic matter (NOM) which cause most of the color in portable waters. SBACR removes these substances and is easily regenerated with sodium chloride, in the same fashion as a water softener. Organic trap resins should be regenerated frequently to prevent the NOM from building up inside the resin beads and eventually causing fouling. For industrial applications it is sometimes useful to add a little caustic to the brine in order to increase capacity and reduce leakage. Use of chloride form anion resin reduces the pH of the product water during the early part of the exhaustion cycle.

DEMINERALIZATION
ResinTech SBACR-OH can be used as the anion component in a variety of demineralization applications where a hydroxide form anion resin is coupled with a hydrogen form cation resin. SBACR-OH is especially well suited for demineralization of organic laden waters. SBACR-OH is not suitable for high operating temperatures or for high flow rates encountered in polishing condensate.