

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**

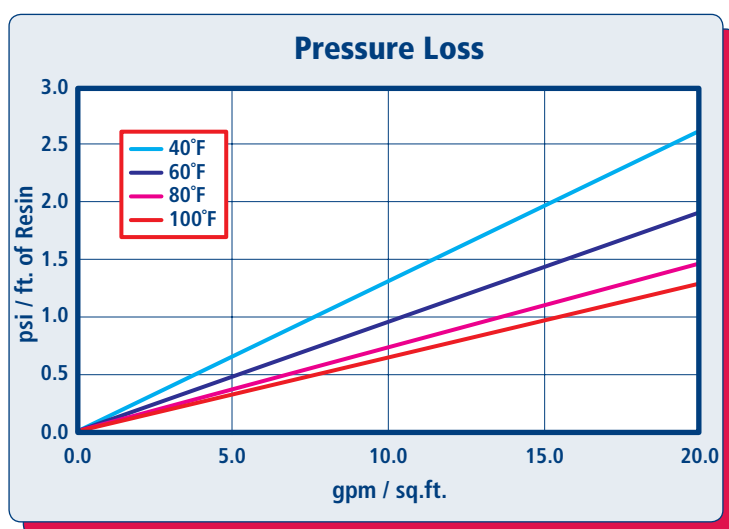
16 to 50 mesh size provides a low pressure drop and superior kinetics

- COMPLIES WITH US FDA REGULATIONS**

Conforms to paragraph 21CFR173.25 of the Food Additives Regulations of the US FDA

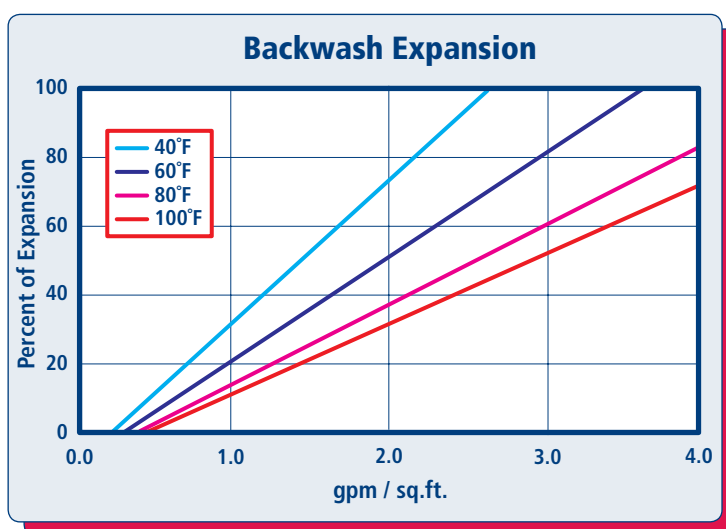
Prior to first use for potable water, resin should be backwashed for a minimum of 20 minutes, followed by 10 bed volumes of downflow rinse.

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.

PHYSICAL PROPERTIES

Polymer Structure	Acrylic/DVB
Polymer Type	Gel
Functional Group	Quarternary Amine
Physical Form	Spherical beads
Ionic Form as shipped	Chloride
Total Capacity	
Hydroxide form	>1.0 meq/mL
Chloride form	>1.25 meq/mL
Water Retention	
Chloride form	55 to 63 percent
Approximate Shipping Weight	
Hydroxide form	42 lbs./cu.ft.
Chloride form	44 lbs./cu.ft.
Swelling, Cl to OH	10 to 15 percent
Screen Size Distribution (U.S. mesh)	16 to 50
Maximum Fines Content (<50 mesh)	1 percent
Minimum Sphericity	90 percent
Uniformity Coefficient	1.7 approx.
Resin Color	White to Cream

Note: Physical properties can be certified on a per lot basis, available upon request

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	0.5 to 1.5 gpm/cu.ft.
Regenerant contact time	>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	1 to 10 gpm/cu.ft.

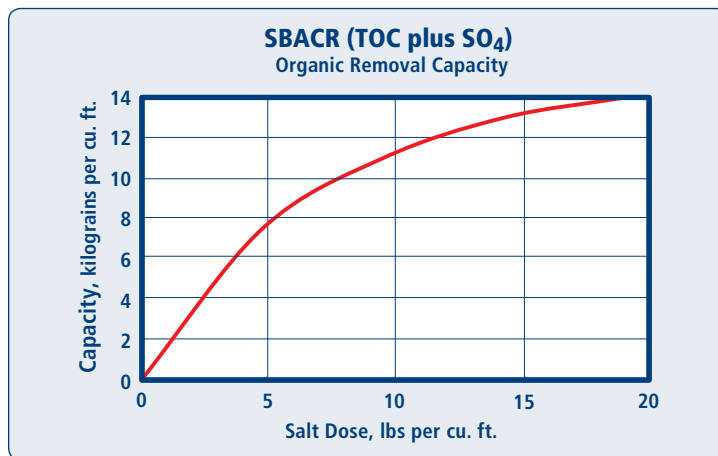
Note: These guidelines describe average low risk operating conditions. They are not intended to be absolute minimums or maximums.

For operation outside these guidelines, contact ResinTech Technical Support

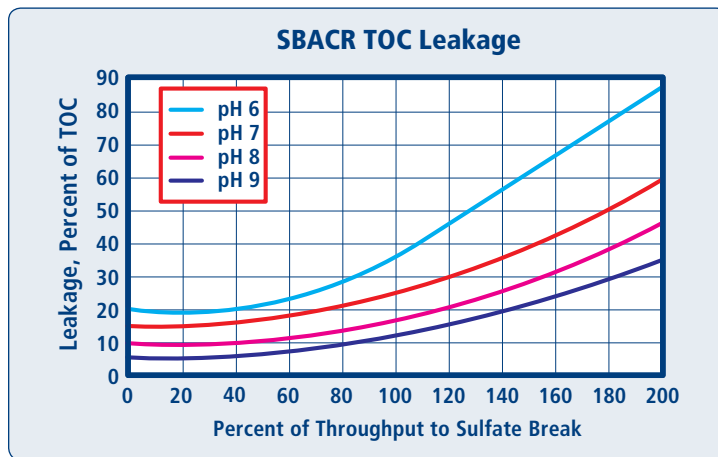
APPLICATIONS

ORGANIC TRAP

RESINTECH SBACR has excellent capacity for tannins and other naturally occurring organic matter (NOM) which cause most of the color in potable 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.



Capacity based on 2 gpm/cu.ft. flow rate, pH near neutral, and 36 inch minimum bed depth. Capacity is for TOC plus sulfate. No engineering downgrade has been applied.



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.



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CAUTION: DO NOT MIX ION EXCHANGE RESIN WITH STRONG OXIDIZING AGENTS. Nitric acid and other strong oxidizing agents can cause explosive reactions when mixed with organic materials, such as ion exchange resins.

MATERIAL SAFETY DATA SHEETS (MSDS) are available for all ResinTech Inc. products. To obtain a copy, contact your local ResinTech sales representative or our corporate headquarters. They contain important health and safety information. That information 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.

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