

SPECIALTY RESIN



PROSELECT™ TANNIN HIGH PURITY

ProSelect Tannin High Purity is a chloride form acrylic macroporous strong base anion resin. It has an aliphatic chemical structure and allows organic ions to move in and out of the resin easily. ProSelect Tannin High Purity is intended for use in the chloride form as an organic trap when the highest possible removal of naturally occurring organics is needed.

FEATURES & BENEFITS

- High capacity for organics
- Excellent regeneration efficiency
- Controlled particle size, low pressure drop
- Superior physical stability
- Conforms to paragraph 21CFR173.25 of the Food Additives Regulations of the US FDA
- NSF/ANSI-61 Certified for Material Safety

Physical Properties

Polymer Structure	Acrylic/DVB
Polymer Type	Macroporous
Functional Group	Quaternary Amine (Quaternary Ammonium Compound)
Physical Form	Spherical beads
Resin Color	White to cream
Ionic Form, as shipped	Chloride
Total Capacity	
Chloride Form	> 0.8 meq/ml
Water Retention	
Chloride Form	63 to 72%
Screen Size Distribution	16 to 50 (US mesh)
Maximum Fines Content	1% (< 50 mesh)
Minimum Sphericity	93%
Uniformity Coefficient	1.7 approx.
Approximate Shipping Weight	
Chloride Form	44 lb/cu.ft.

NOTE: 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.

Part Number

Chloride Form..... ER20006-HP

Suggested Operating Conditions

Maximum Temperature	
Chloride Form	150°F (66°C)
Minimum Bed Depth	24 inches
Backwash Expansion	25 to 50%
Maximum Pressure Loss	20 psi
Operating pH Range	0 to 14 (< 8.0 pH prevents fishy smell)
Regenerant Concentration	
Salt Cycle	2 to 10% NaCl
Regenerant Level	4 to 10 lb/cu.ft.
Regenerant Flow Rate	0.25 to 1.0 gpm/cu.ft.
Regenerant Contact Time	> 60 minutes
Displacement Flow Rate	Same as dilution water
Displacement Volume	10 to 15 gal/cu.ft
Rinse Flow Rate	Same as service flow
Rinse Volume	35 to 60 gal/cu.ft.
Service Flow Rate	
Average Flow	1 to 4 gpm/cu.ft.
Peak Flow	< 10 gpm/cu.ft.

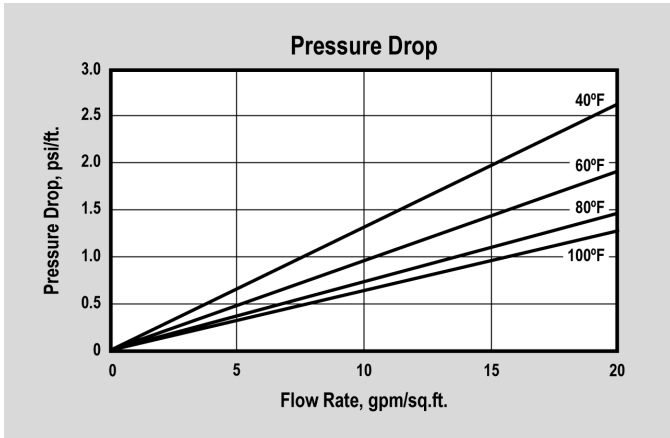
CAUTION: DO NOT MIX ION EXCHANGE RESINS WITH STRONG OXIDIZING AGENTS. Nitric acid and other strong oxidizing agents can cause explosive reactions when mixed with organic materials such as ion exchange resins.

Note: These suggestions and data are based on information we believe to be reliable. However, we do not make any guarantee or warranty. We caution against using these products in any unsafe manner or in violation of any patents. Further, we assume no liability for the consequences of any such actions.

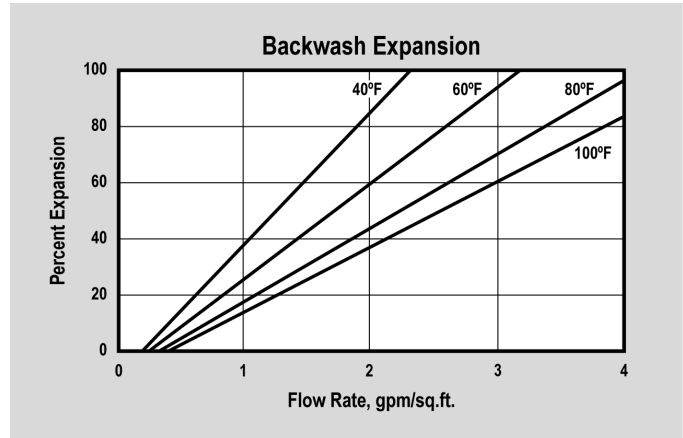
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PRESSURE DROP — The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various temperatures.

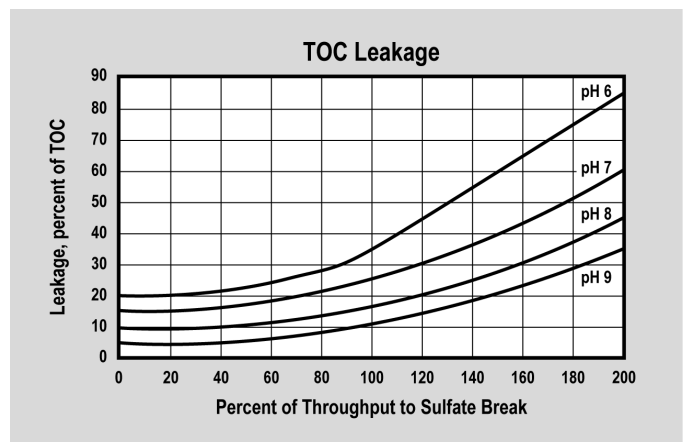
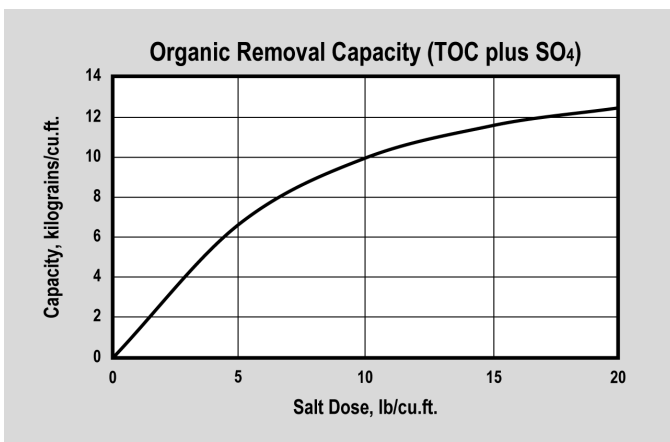


BACKWASH — The graph above shows the expansion characteristics as a function of flow rate at various temperatures.

APPLICATIONS

Organic Trap

ProSelect Tannin High Purity has the highest possible capacity for tannins and other naturally occurring organic matter (NOM) due to its acrylic polymer backbone and macroporous physical structure. Tannins and similar naturally occurring organics cause most of the color in potable waters. ProSelect Tannin High Purity removes these substances and is easily regenerated with sodium chloride. 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 AND LEAKAGE — Capacity and leakage data are 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.