

Purolite® A400

Gel Type 1 Strong Base Anion Exchange Resin

Purolite A400 is a clear gel Type 1 strong-base anion exchanger with both high operating capacity and the ability to achieve low residual silica levels. Minimal quantities of caustic soda are required compared with those typical of the classical Type 1 (**Purolite A600**) quaternary ammonium structure based on polystyrene. It has a clear gel structure, showing excellent regeneration efficiency and rinse characteristics. **Purolite A400** functions well both in mixed bed and layered bed demineralizer systems, where specially tailored particle size ranges result in achieving or maintaining good separations. **Purolite A400** has exceptional physical stability for a conventional gel-type resin which permits a long life without the development of excessive pressure drop; it also shows good kinetics of exchange, enabling very low concentration levels of both strong and weak acid anions to be achieved at practical flowrates.

TYPICAL PHYSICAL AND CHEMICAL CHARACTERISTICS

BASIC FEATURES:

Application	Regeneration Efficient Demineralization / Silica Removal
Polymer Structure	Gel polystyrene crosslinked with divinylbenzene
Appearance	Spherical beads
Functional Group	Type 1 Quaternary Ammonium
Ionic Form as Shipped	Cl ⁻

PRODUCT INFORMATION:

Total Capacity (min.)	1.3 eq/l (28.4 Kgr/ft ³) (Cl ⁻ form)
Moisture Retention, Cl⁻ Form	48 - 54 %
Particle Size Range	300 - 1200 µm
<300 µm (max.)	1 %
Uniformity Coefficient (max.)	1.7
Reversible Swelling, Cl⁻ → OH⁻ (max.)	20 %
Specific Gravity	1.08
Shipping Weight (approx.)	680 - 715 g/l (42.5 - 44.7 lb/ft ³)
Temp Limit, Cl⁻ Form	100°C (212°F)
Temp Limit, OH⁻ Form	60°C (140°F)