

Gel Type I Strong Base Anion Exchange Resin

Purolite A400E is a clear gel Type I 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 I (Purolite A600) quaternary ammonium structure based on polystyrene. It has a clear gel structure, showing excellent regeneration efficiency and rinse characteristics. Purolite A400E 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 A400E 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. Specially manufactured for use in food plants

**Basic Features:**

Application	Regeneration Efficient Demineralization - Mixed Beds - Food grade
Polymer Structure	Gel polystyrene crosslinked with divinylbenzene
Appearance	Spherical beads
Functional Group	Type 1 Quaternary Ammonium
Ionic form as shipped	Cl <sup>-</sup>

**Typical Physical and Chemical Characteristics:**

Total Capacity (min.)	Cl <sup>-</sup>	1.30 eq/l
Total Capacity (min.)	Cl <sup>-</sup>	28.38 kGr/ft <sup>3</sup>
Moisture Retention	Cl <sup>-</sup>	48-54 %
Mean Size Typical		0.60-0.85 mm
Uniformity Coefficient (max.)		1.70
Reversible Swelling (max.)	Cl <sup>-</sup> → OH <sup>-</sup>	20 %
Specific Gravity		1.08 g/ml
Shipping Weight (approx.)		680-710 g/l
Shipping Weight (approx.)		42.5-44.7 lbs/ft <sup>3</sup>
Temp Limit	OH <sup>-</sup>	60 °C
Temp Limit	OH <sup>-</sup>	140 °F
Temp Limit	Cl <sup>-</sup>	100 °C
Temp Limit	Cl <sup>-</sup>	212 °F
pH Limits		0-14 (Stability)

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pH Limits                      OH<sup>-</sup>                      1-10 (Operating)

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