

Macroporous Type I Strong Base Anion Exchange Resin

Purolite A500TL is a macroporous poly(vinylbenzyl-trimethylammonium) exchanger with high resistance to both osmotic and mechanical stress which may be encountered in both make-up, and condensate polishing mixed beds. It has a specially tailored particle size range to ensure near, perfect separation from the other components of the TRILITE system, Purolite IP7, and Purolite C150TL (for example). The large-pore structure has been designed for use in the demineralization of aqueous solutions containing appreciable quantities of high-molecular weight organic materials of the fulvic or humic acid type. Its resistance to organic fouling is superior to that of the corresponding gel resins, as is its excellent resistance to osmotic and thermal shock. It has the normal thermal stability in most salt forms of the conventional Type 1 resin, while retaining a high exchange capacity and good mechanical properties.

Basic Features:

Application	Demineralization - Mixed Bed
Polymer Structure	Macroporous polystyrene crosslinked with divinylbenzene
Appearance	Spherical beads
Functional Group	Type 1 Quaternary Ammonium
Ionic form as shipped	SO4 ⁻

Typical Physical and Chemical Characteristics:

Total Capacity (min.)	Cl ⁻	1.15 eq/l
Total Capacity (min.)	Cl ⁻	25.11 kGr/ft ³
Moisture Retention	Cl ⁻	53-58 %
Mean Size Typical		0.60-0.78 mm
Uniformity Coefficient (max.)		1.30
Reversible Swelling (max.)	Cl ⁻ → OH ⁻	15 %
Specific Gravity		1.09 g/ml
Shipping Weight (approx.)		665-685 g/l
Temp Limit	OH ⁻	65 °C
Temp Limit	OH ⁻	150 °F
Temp Limit	Cl ⁻	100 °C
Temp Limit	Cl ⁻	212 °F
pH Limits		0-14 (Stability)
pH Limits	H ⁺	0-11 (Operating)