

*Macroporous Type II Strong Base Anion Exchange Resin*

Purolite A510 is a macroporous type 2 strong base anion exchange resin. Its macroporous structure offers excellent resistance to osmotic and physical shock. Purolite A510 has a high operating capacity, especially on high-FMA feedwaters, as well as a high reversible sorptive capacity for complex organic materials, such as the fulvic and humic acids which occur in many surface water supplies. In a conventional two-stage deionizing plant, its silica-removal properties are comparable with those of any premium type 2 strong base anion resin; however, as with other resins of this type, a polishing mixed-bed is necessary to ensure the lowest levels of residual silica. Purolite A510 in the chloride form has a unique ability to remove organic color bodies from polluted waters, pharmaceutical and chemical streams. For these applications warm caustic soda or salt should be used (35-50°C).

Typical Physical and Chemical Characteristics

BASIC FEATURES:

**Application** - Demineralization with High Regeneration Efficiency and Dealkalization

**Polymer Structure** - Macroporous polystyrene crosslinked with divinylbenzene

**Appearance** - Spherical beads

**Functional Group** - Type 2 Quaternary Ammonium

**Ionic Form as Shipped** - Cl<sup>-</sup>

PRODUCT INFORMATION:

Total Capacity (min.)	1.15 eq/l (25.1 Kgr/ft <sup>3</sup> ) (Cl <sup>-</sup> form)
Moisture Retention	44 - 51 % (Cl <sup>-</sup> form)
Particle Size Range	300 - 1200 µm
Uniformity Coefficient (max.)	1.7
Reversible Swelling, Cl <sup>-</sup> → OH <sup>-</sup> (max.)	10 %
Specific Gravity	1.08
Shipping Weight (approx.)	680 - 715 g/l (42.5 - 44.7 lb/ft <sup>3</sup> )
Temp Limit, Cl <sup>-</sup> Form	100°C (212°F)
Temp Limit, OH <sup>-</sup> Form	35°C (95°F)