

Macroporous Type I Strong Base Anion Exchange Resin

**Purolite A-510FL** is a macroporous poly(vinylbenzyl -dimethyl-hydroxyethyl ammonium) exchanger with an excellent resistance to osmotic and physical shock. It 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. It is especially recommended for use in counter-flow regeneration processes such as the Fluidlite technique where regeneration is carried out downflow. This technique ensures an efficient downflow displacement rinse when using high quality treated water. This is because there is little tendency for the higher density regenerant to mix with the lower density water, as can happen when using up-flow regeneration.

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.

**Basic Features:**

|                       |                                                         |
|-----------------------|---------------------------------------------------------|
| Application           | For counterflow operation                               |
| Polymer Structure     | Macroporous polystyrene crosslinked with divinylbenzene |
| Appearance            | Spherical Beads                                         |
| Functional Group      | Type 2 Quaternary Ammonium                              |
| Ionic form as shipped | Cl <sup>-</sup>                                         |

**Typical Physical and Chemical Characteristics:**

|                               |                                   |                           |
|-------------------------------|-----------------------------------|---------------------------|
| Total Capacity (min.)         | Cl <sup>-</sup>                   | 1.20 eq/l                 |
| Total Capacity (min.)         | Cl <sup>-</sup>                   | 26.20 kGr/ft <sup>3</sup> |
| Moisture Retention            | Cl <sup>-</sup>                   | 44 - 51 %                 |
| Mean Size Typical             |                                   | 0.65 - 0.85 mm            |
| Uniformity Coefficient (max.) |                                   | 1.50                      |
| Reversible Swelling (max.)    | Cl <sup>-</sup> → OH <sup>-</sup> | 10 %                      |
| Specific Gravity              |                                   | 1.08 g/ml                 |
| Shipping Weight (approx.)     |                                   | 680 - 715 g/l             |
| Temp Limit                    | OH <sup>-</sup>                   | 35 °C                     |
| Temp Limit                    | OH <sup>-</sup>                   | 95 °F                     |

|            |                 |                    |
|------------|-----------------|--------------------|
| Temp Limit | Cl <sup>-</sup> | 100 °C             |
| Temp Limit | Cl <sup>-</sup> | 212 °F             |
| pH Limits  |                 | 0 - 14 (Stability) |

**LENNTECH**

[info@lennotech.com](mailto:info@lennotech.com)

[www.lennotech.com](http://www.lennotech.com)

Tel. +31-15-261.09.00

Fax. +31-15-261.62.89