

## **Product Data Sheet**

PUROLITE® A830

# **Weak Base Anion Macroporous**

### Macroporous Weak Base Anion Exchange Resin

Purolite A830 is a high capacity macroporous anion exchange resin with an acrylic matrix. This matrix ensures excellent and fast removal of both mineral and organic acids. The efficient desorbtion which occurs upon regeneration markedly reduces the risk of resin fouling, thus maintaining the exceptionally high operating capacity which exists as a result of the complex amine functionality. Purolite A830 is ideally suited to the removal of nitrates or sulphates from process waste and from condensate in nitrogen based fertilizer production. It is regenerated very efficiently with ammonia. In conjunction with Purolite C160, a useful recovery process, has been developed. However it is sensitive to nitrites and hence their prior removal from solution by oxidation is recommended. The tough resilient macroporous structure affords excellent mechanical strength and resistance to osmotic shock. The maximum temperature of operation is as given below for the free base form. Higher operating temperatures may be used when operating in salt forms. However it is not then permissible to rinse thoroughly with demineralized water, since resin is converted to the free base form by this procedure

### **Basic Features:**

Application Special Applications - Very High Capacity

Polymer Structure Macroporous polyacrylic crosslinked with divinylbenzene

Appearance Spherical beads
Functional Group Complex Amine

Ionic form as shipped Free Base

#### **Typical Physical and Chemical Characteristics:**

Total Capacity (min.)	Free Base	2.75 eq/l
Total Capacity (min.)	Free Base	60.04 kGr/ft <sup>3</sup>
Moisture Retention	Free Base	50-56 %
Mean Size Typical		0.60-0.85 mm
Uniformity Coefficient (max.)		1.70
Reversible Swelling (max.)	$FB \rightarrow CI^-$	20 %
Specific Gravity		1.10 g/ml
Shipping Weight (approx.)		690-725 g/l
Shipping Weight (approx.)		43.1-45.3 lbs/ft <sup>3</sup>
Temp Limit	OH-	35 °C
Temp Limit	OH-	95 °F
pH Limits		0-14 (Stability)
pH Limits	H <sup>+</sup>	0-9 (Operating)

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