

Gel Type Weak Base Anion Exchange Resin

Purolite A847S is a unique weak base resin, with a gel acrylic divinylbenzene matrix and tertiary amine functionality. The special properties are associated with the extremely low rinse requirement after regeneration with caustic soda together with an increase in useful operating capacity of up to 10% over similar resins Purolite A847S shows excellent resistance to organic fouling and because of its ability to adsorb and desorb organics efficiently, can act as a guard column for strong base polystyrene resin that may be placed downstream in a demineralisation system. Purolite A847S shows unique resistance against osmotic shock attrition as well as being physically resistant to mechanical breakage. Efficiency of regeneration is good and only 125% to 135% of stoichiometric caustic soda is required to regenerate the exhausted resin. When regenerating with ammonia, 150% of stoichiometric quantity should be used and with sodium carbonate, 250%

**Basic Features:**

Application	Sugar Treatment - Low Rinse Volumes and High Purity
Polymer Structure	Gel Polyacrylic crosslinked with Divinylbenzene
Appearance	Spherical beads
Functional Group	Tertiary Amine
Ionic form as shipped	Free Base

**Typical Physical and Chemical Characteristics:**

Total Capacity (min.)	Free Base	1.60 eq/l
Total Capacity (min.)	Free Base	34.93 kGr/ft <sup>3</sup>
Moisture Retention	Free Base	56-62 %
Mean Size Typical		0.65-0.90 mm
Uniformity Coefficient (max.)		1.70
Irreversible Swelling (max.)		5
Reversible Swelling (max.)	FB → Cl <sup>-</sup>	25 %
Specific Gravity		1.08 g/ml
Shipping Weight (approx.)		675-705 g/l
Shipping Weight (approx.)		42.4-44.1 lbs/ft <sup>3</sup>
Temp Limit	FB	40 °C
Temp Limit	FB	104 °F
Temp Limit	Cl <sup>-</sup>	100 °C
Temp Limit	Cl <sup>-</sup>	212 °F

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pH Limits		0-14 (Stability)
pH Limits	H <sup>+</sup>	0-9 (Operating)

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