

Macroporous Weak Base Anion Exchange Resin

Purolite A123S is a macroporous poly(vinylbenzyl)tertiary amine exchanger of moderate porosity, specially developed for use in the demineralization of sweetening products. It shows good swelling characteristics in combination with low strong base capacity, which inhibits generation of color at high temperatures. Its macroporous structure results in excellent resistance to both osmotic shock and organic fouling. As a result, many of the high molecular weight color bodies present are also removed and these color bodies can readily be eluted during the regeneration. This can be carried out with low amounts of caustic soda, ammonia, or soda ash to give high operating capacities. Purolite A123S, with its macroporous styrene-divinylbenzene matrix, not only possesses good rinse characteristics, but its high total exchange capacity ensures high ash-removal figures (often >75% of total), with significant savings in running cost thanks to its excellent regeneration efficiency.

**Basic Features:**

Application	Sweetener Deashing
Polymer Structure	Macroporous polystyrene 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	1.70 eq/l
Total Capacity (min.)	Free Base	37.12 kGr/ft <sup>3</sup>
Moisture Retention	Cl <sup>-</sup>	48-55 %
SBC		10-15 %
Mean Size Typical		0.65-0.90 mm
Uniformity Coefficient (max.)		1.70
Reversible Swelling (max.)	FB → Cl <sup>-</sup>	25 %
Specific Gravity		1.04 g/ml
Shipping Weight (approx.)		645-675 g/l
Shipping Weight (approx.)		40.3-42.2 lbs/ft <sup>3</sup>
Temp Limit	OH <sup>-</sup>	70 °C
Temp Limit	OH <sup>-</sup>	158 °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>	0-8 (Operating)

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