

A-100

Macroporous Weak-Base Anion-Exchange Resin
(FOR THE DEMINERALISATION OF WATER)

Technical Data

PRODUCT DESCRIPTION

Purolite A-100 is a macroporous poly(vinylbenzyl) tertiary amine type exchange resin, primarily used for the removal of anions of strong acids in a two-bed deionization process. Because of its structure, it has excellent mechanical and osmotic stability, and is able to remove high molecular weight organic materials from the influent water, thus protecting a following strong-base resin from fouling. The organics are readily eluted, and the regenerated resin shows good rinse behaviour, and a very acceptable operating capacity on relatively high-TDS waters.

While there are several other specially-tailored macroporous intermediate-base resins in the **Purolite A-100** series, **Purolite A-100** itself is probably the most generally useful. A suitably-graded version, **Purolite A-100DL**, is recommended for use in conjunction with **Purolite A-200DL** or **A-400DL** in layered-bed DOUBLITE anion exchange systems.

Typical Chemical and Physical Characteristics

Polymer Structure	Macroporous polystyrene crosslinked with divinylbenzene
Appearance	Spherical beads
Functional Groups	Tertiary amino
Ionic Form - as shipped	FB form
Total Capacity (FB Form)	1.3 eq/l min
Strong Base Capacity	10-20 % of total
Moisture Retention (Cl Form)	53-60%
Bead Size Range (microns)	+1200 <5 %, -300 <1%
Screen Size Range (U.S. Standard Screen)	16-50 mesh
Reversible Swelling (FB → Cl)	20%
Specific Gravity (FB Form)	1.04
Shipping Weight	655-685 kg/m ³ (41-43 lb/ft ³)
Temperature Limit (FB Form)	60°C (140°F)
(Cl Form)	100°C (212°F)
pH Limits (stability)	0-14
(operating)	0-9