

# A-400 MB

## Strong-Base Type I (Clear Gel) Anion Exchange Resin

(FOR USE IN MIXED BEDS NEEDING HIGH-EFFICIENCY SILICA REMOVAL )

### Technical Data

#### PRODUCT DESCRIPTION

**Purolite A-400 MB** is a strong-base anion exchanger with both high operating capacity and the ability to achieve low residual silica levels. Minimal quantities of caustic soda are required compared with those typical of the classical Type I quaternary ammonium structure based on polystyrene. It has a clear gel structure, showing excellent regeneration efficiency and superb rinse characteristics. **Purolite A-400 MB** has a specially tailored particle size for use as the anion component in mixed bed (**MIXLITE**) demineralizer systems. Its specially tailored particle size range ensures excellent separation from MB grades of strong acid cation resin components, for example **Purolite C-100MB** or **MBH**.

**Purolite A-400 MB** has exceptional physical stability for a conventional gel-type resin which permits a long life without the development of excessive pressure drop; it also shows good kinetics of exchange, enabling the reduction, to very low concentration levels, of both strong and weak acid anions at practical flowrates .

#### Typical Physical, Chemical, & Operating Characteristics

Polymer Matrix Structure .....	Polystyrene crosslinked with divinylbenzene
Physical Form and Appearance .....	Clear golden spherical beads
Whole Bead Count .....	>90%
Functional Groups .....	Type I Quaternary Ammonium
Ionic Form (as shipped) .....	Cl <sup>-</sup> form
Shipping Weight .....	680-715 g/l (42.5- 44.5 lb/ft <sup>3</sup> )
Screen Size Range (British Standard Screen) .....	14-52 mesh, wet
(U.S. Standard Screen) .....	16-50 mesh, wet
Particle Size Range (microns) .....	+1200 <2 %, -300 <1%
Moisture Retention, Cl <sup>-</sup> form .....	48-54%
Swelling (Cl <sup>-</sup> → OH <sup>-</sup> ), max .....	20%
Specific Gravity, Moist Cl <sup>-</sup> Form .....	1.08 g/ml
Total Exchange Capacity, Cl <sup>-</sup> Form (wet, volumetric) .....	1.3 eq/l min
(dry, weight) .....	3.7 eq/kg min
Max Operating Temperature, Cl <sup>-</sup> Form .....	100° C, (212° F)
OH <sup>-</sup> Form .....	60° C, (140° F)
pH Range (Stability), OH <sup>-</sup> Form .....	0-14
(Operating), OH <sup>-</sup> Form .....	1-10