



# EPOCHEMMIE CO., LTD

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## DATA SHEET

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**Commodity:** Weak-Base (Gel) Arcylic Anion Exchange Resin      **Type:** A503

For use in demineralization of water containing organic matter

**Applications:** A503 is a high capacity, shock resistant ,acrylic gel ,weakly base anion resin. Supplied in the free bass form as moist, tough, uniform spherical beads. A503 has tremendous regeneration efficiency and low rinse requirement and is also capable of reversibly adsorbing large organic ions. A503 is intended primarily for use in multiple bed deionization ,pharmaceutical , and food grade process applications

### **Product Description:**

Typical physical & Chemical characteristics

Polymer Matrix Structure	Arcylic Crosslinked with DVB
Physical Form and Appearance	spherical beads
Whole Bead Count	95% min.
Functional Groups	R-N(CH <sub>3</sub> ) <sub>2</sub> <sup>+</sup>
Ionic Form ,as shipped	Free base
Total Exchange Capacity, CL <sup>-</sup> form, wet, volumetric	1.6 eq/l min.
Moisture Retention, CL <sup>-</sup> form	56-62%
Particle Size Range	+1.2 mm 5%max, -0.3 mm 1%max
Swelling FB→ CL <sup>-</sup>	20% max
Shipping Weight (approx.)	700 g/l (43 lb/ft3)
PH Range, Stability	0 – 9
Specific gravity,moist CL <sup>-</sup> form	1.07

**Suggested Operating Condition**

Maximum Temperature FB Form	100°C (212°F) max
Minimum Bed Depth	0.6m(24inches)
Backwash Rate	50 to 75% Bed Expansion
Regenerant Concentration	0.5 –6% NaOH
Regenerant Flow Rate	0.5 to 1.0gpm/cu.ft.
Regenerant Contact Time	At least 30 minutes
Regenerant Level	3 to 6 pounds/ cu.ft.
Displacement Rinse Rate	Same as Regenerant Flow Rate
Displacement Rinse Volume	10 to 15 gallons/cu.ft.
Fast Rinse Rate	Same as Service Flow Rate
Fast Rinse Volume	35 to 60 gallons/cu.ft.
Service Flow Rate	2 to 4 gpm/cu.ft.