

## GA-200

### Marcoporous Strong Base Anion Exchange Resin

#### Product Description & Applications

G-ion GA-200 is a Type I, macroporous strong-base anion exchange resin supplied in chloride or hydroxide and has high capacity, shock resistant with high physical stability.

G-ion GA-200 is widely used in multiple and mixed bed demineralizers, wherever complete ion and organic removal are required. It is also intended for use in all types of deionization systems, condensate polishing and chemical processing applications.

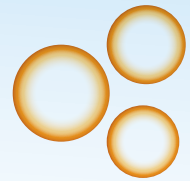


#### Typical Physical & Chemical Characteristics

Polymer Matrix Structure	Macroporous Polystyrene with DVB
Functional Group	R-N-(CH <sub>3</sub> ) <sub>3</sub> X
Ionic Form, as shipped	Chloride (Cl <sup>-</sup> )
Physical Form And Appearance	Clear Spherical Beads
Puerility	95% min.
Screen Size Range-U.S. Standard Screen	16-50 mesh, wet
Particle Size Range	0.315-1.25mm
Uniformity Coefficient	1.6 max.
Water Retention, Na <sup>+</sup> form	43-48%
Swelling Na <sup>+</sup> H <sup>+</sup> → Ca <sup>2+</sup> → Na <sup>+</sup>	10% max. 5% max.
Shipping Weight, Na <sup>+</sup> form	780-880 g/l (51 lbs/cu.ft, approx.)
Total Exchange Capacity, Na <sup>+</sup> form	2.0 eq/l min.
pH Range	0-14

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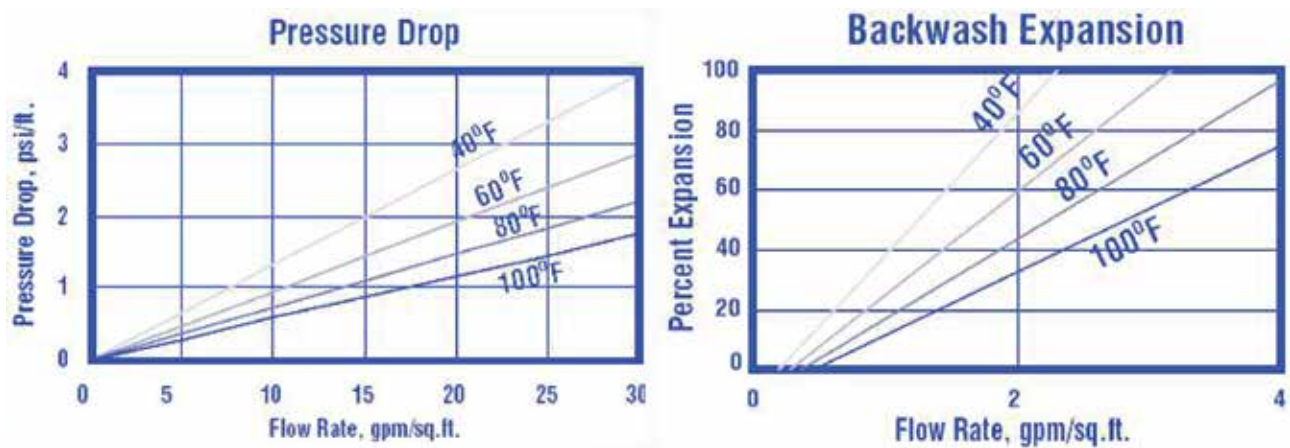
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### Suggested operating conditions

Maximum Temperature	Na <sup>+</sup> form	120°C (248°F) max.
	H <sup>+</sup> form	100°C (212°F) max.
Minimum Bed Depth		0,6 m (24 inches)
Backwash Rate		25-50% Bed Expansion
Regeneration	Sodium Cycle	8-20% NaCl
	Hydrogen Cycle	10% HCl, 2-8% H <sub>2</sub> SO <sub>4</sub>
	Flow Rate	2 to 7 BV/h (0,25 to 0,90 gpm/cu.ft)
	Contact Time	At least 30 Minutes
Displacement Rinse Rate		Same as Regenerant Flow Rate
Displacement Rinse Volume		10 -15 gallons/cu.ft
Fast Rinse Rate		Same as Service Flow Rate
Fast Rinse Volume		35-60 gallons/cu.ft
Service Flow Rate		4-8 BV/h (1.0-5.0 gpm/cu.ft)

### Hydraulic properties



#### Pressure Drop:

The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various Temperatures.

#### Backwash:

After each cycle the resin bed should be backwashed at a rate that expands the bed 50 to 75 percent. That will remove any foreign matter and reclassify the bed. The graph above shows the expansion characteristics of Pure G-ion GA-200 in the sodium form.