

# GA-511

## Weak-Base (Macro) Acrylic Anion Exchange Resin

### Product Description & Applications

G-ion GA-511 is a high capacity, resistant to high organic, macroporous type, weak basic anion resin. Mainly used in food and pharmaceutical industries for decolorisation, removal of SO<sub>4</sub><sup>2-</sup>, Cl<sup>-</sup>, and NO<sub>3</sub><sup>-</sup>, and adsorption and purification of Citric acid and Vitamin C.

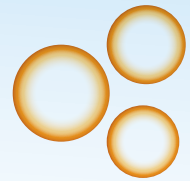


### Typical Physical & Chemical Characteristics

Polymer Matrix Structure	Acrylic crosslinked with 8% DVB
Functional Group	R-NH(CH <sub>2</sub> ) <sub>2</sub> -
Ionic Form, as shipped	Free Base
Physical Form And Appearance	Light Yellow 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	1-9

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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)