

## GS-400

### Chelating Resin

#### Product Description & Applications

G-ion GS-400 is a macroporous weak acid cation exchange resin based on the iminodiacetic acid functional group, which has chelating properties for heavy metal ions even against high concentrations of calcium. High capacity and good physical stability.

G-ion GS-400 finds use in processes for extraction and recovery of metals from ores, galvanic plating solutions, pickling baths and effluents.

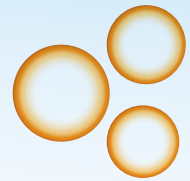


#### Typical Physical & Chemical Characteristics

Polymer Matrix Structure	Macroporous, Styrene / DVB
Functional Group	Iminodiacetic
Ionic Form, as shipped	Na <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	6-11

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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)