Water Purification Supplies

Industry Grade gel type strong acid cation exchange resin 8% Crosslink
Used for water softening and demineralization, high flow rate applications.

PRODUCT DESCRIPTION

RESIN-CA Is a premium grade gel type strong acid cation exchange resin produced by sulfonation of styrene-divinylbenzene (DVB) copolymers in standard Gaussian size distribution. It has excellent chemical, physical and thermal stability, and high exchange capacity. It comes in sodium form is widely used for water softening to reduce total hardness. In hydrogen form, it also can be used for water demineralization.

BASIC FEATURES

Application:	Water softening, demineralization
Polymer matrix structure:	Gel polystyrene crosslinked with divinylbenzene (DVB)
Appearance:	Amber, spherical beads
Functional Group:	Sulphonic acid
Ionic form as shipped:	Na^+ or H^+ when ordered as TC008-H

PHYSICAL AND CHEMICAL PROPERTIES

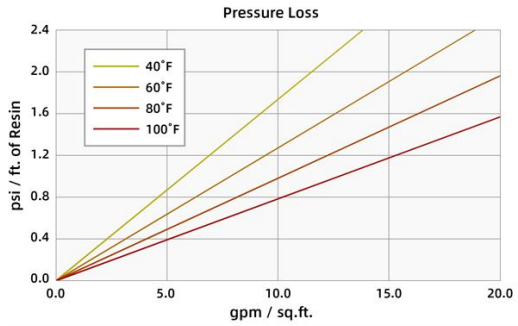
NO.	ITEM		SPEC
1	Total exchange capacity (eq/L)	Na^+ form	≥2.0
		H^+ form	≥1.9
2	Moisture retention (%)	Na^+ form	43-48
		H^+ form	48-56
3	Particle size range (%)		0.315-1.25 mm≥95
4	Whole uncracked beads after attrition (%)		≥96
5	Shipping weight (g/ml)	Na^+ form	0.78-0.88
		H^+ form	0.75-0.85

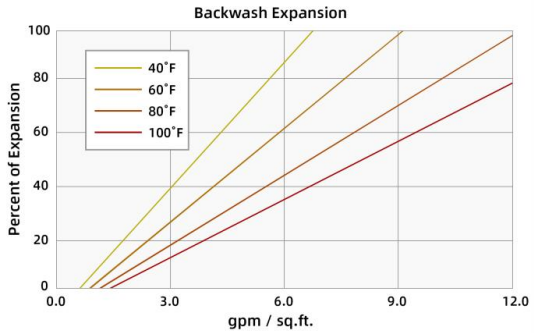
6	Specific gravity (g/ml)	Na^+ form	1.26-1.30
		H^+ form	1.19-1.23
7	Effective size (mm)		0.4 - 0.6
8	Uniformity coefficient		<1.7
9	Reversible swelling, $Na^+ \rightarrow H^+$ (%)		<8

SUGGESTED OPERATING CONDITIONS

NO.	ITEM		SPEC
1	Max operating temperature	Na^+ form	120 ℃
		H^+ form	90℃
2	pH range		0-14
3	Service flow rate		5-50 BV/h
4	Regenerate	Na^+ form	10-15% NaCl
		H^+ form	4-10% HCl； 1-8%H_2SO_4

HYDRAULIC PROPERTIES





PRESSURE LOSS

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

BACKWASH

The graph above shows the expansion characteristics as a function of flow rate at various temperatures.