Lanlang® TC007

Industry Grade gel type strong acid cation exchange resin

Used for water softening and demineralization

PRODUCT DESCRIPTION

Lanlang ® TC007 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. TC007 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 TC007-H

PHYSICAL AND CHEMICAL PROPERTIES

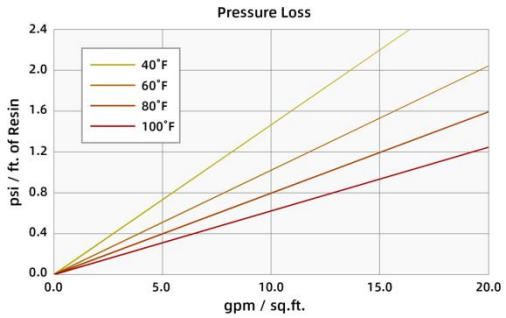
NO.	ITEM		SPEC
1	Total exchange capacity (eq/L)	Na^+ form	≥1.9
		H^+ form	≥1.8
2	Moisture retention (%)	Na^+ form	45-50
		H^+ form	50-58
3	Particle size range (%)		0.315-1.25 mm ≥95
4	Whole uncracked beads after attrition (%)		≥96
5	Shipping weight (g/ml)	Na^+ form	0.77-0.87
		H^+ form	0.75-0.85
6	Specific gravity (g/ml)	Na^+ form	1.25-1.29
		H^+ form	1.17-1.22

7	Effective size (mm)	0.4 - 0.6
8	Uniformity coefficient	<1.7
9	Reversible swelling, $Na^+ \rightarrow H^+$ (%)	<8

SUGGESTED OPERATING CONDITIONS

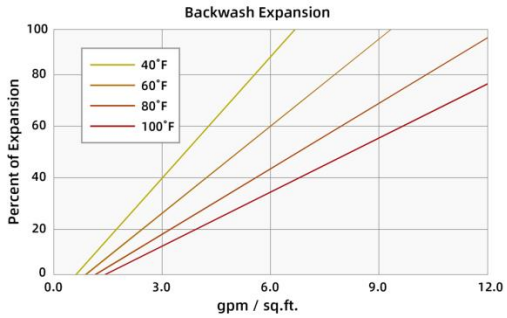
NO.	ITEM		SPEC
1	Max operating temperature	Na^+ form	120 ℃
		H^+ form	90℃
2	pH range		0-14
3	Service flow rate		5-50 BV/h
4	Regenerate	Na^+ form	10-15% NaCl
		H^+ form	4-10% HCl； 1-8%H_2SO_4

HYDRAULIC PROPERTIES



PRESSURE LOSS

The graph above shows the expected pressure loss of Lanlang TC007 per foot of bed depth as a function of flow rate at various temperatures.



BACKWASH

The graph above shows the expansion characteristics of Lanlang TC007 as a function of flow rate at various temperatures.