

PRODUCT DATA SHEET



Lanlang® TC007C

Coarse mesh size gel type strong acid cation exchange resin

Used for water softening and demineralization, high flow rate applications

Lanlang® TC007C is a premium grade gel type strong acid cation exchange resin produced by sulfonated styrene-divinylbenzene (DVB) copolymers with coarse mesh size. It has excellent chemical & physical stability and kinetic exchange capacity. TC007C in sodium form is widely used for water softening to reduce total hardness. In hydrogen form, it also can be used for water demineralization. TC007C is suited to the applications where high flow rate and low pressure loss are needed.

Basic Features:

Application:	Water softening, demineralization, high flow rate applications
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 TC007C-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	51-56
3	Particle size range (%)		0.60-1.25 mm≥95
4	Whole uncracked beads after attrition (%)		≥96
5	Shipping weight (g/ml)	Na ⁺ form	0.77-0.87
		H ⁺ form	0.73-0.83
6	Specific gravity (g/ml)	Na ⁺ form	1.25-1.29
		H ⁺ form	1.17-1.22
7	Effective size (mm)		0.65 – 1.0
8	Uniformity coefficient		<1.4
9	Reversible swelling, Ca ²⁺ or Na ⁺ → H ⁺ (%)		<8

Suggested Operating Conditions:

NO.	ITEM	SPEC
1	Max operating temperature	120 °C
2	PH range	0-14
3	Service flow rate	5-50 BV/h
4	Regenerant	10-15% NaCl, 4-10% HCl, 1-8% H ₂ SO ₄