# PRODUCT DATE SHEET



## Lanlang®TC008

High capacity gel type strong acid cation exchange resin Used for water softening and demineralization

Lanlang <sup>®</sup> TC008 Is a premium grade gel type strong acid cation exchange resin produced by sulfonated styrene-divinylbenzene (DVB) copolymers in standard Gaussian size distribution. It has excellent chemical, physical and thermal stability, and high exchange capacity. TC008 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<sup>+</sup> or H<sup>+</sup> when ordered as TC008-H

## **Physical and Chemical Properties:**

NO.	ITEM		SPEC
1	Total exchange	Na⁺ form	≥2.0
	capacity (eq/L)	H+ form	≥1.9
2	Moisture retention	Na <sup>+</sup> form	43-48
	(%)	H⁺ form	48-53
3	Particle size range (%)		0.315-1.25 mm≥95
4	Whole uncracked beads after attrition (%)		≥96
5	Shipping weight	Na⁺ form	0.78-0.88
	(g/ml)	H⁺ form	0.74-0.84
6	Specific gravity (g/ml)	Na <sup>+</sup> 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, Ca <sup>2+</sup> or Na <sup>+</sup> → H <sup>+</sup> (%)		<8

### **Suggested Operating Conditions:**

NO.	ITEM	SPEC		
1	Max operating temperature	120 ℃		
2	PH range	0-14		
3	Service flow rate	5-50 BV/h		
4	Regenerant	10-15% NaCl, 4-10% HCl, 1-8% H₂SO <sub>4</sub>		