

PRODUCT DATA SHEET



Lanlang® TC113DF

Fine mesh size macroporous weak acid cation exchange resin

Used for water softening, dealkalization and demineralization

Lanlang® TC113DF is a premium grade macroporous weak acid cation exchange resin with polyacrylic matrix structure with fine mesh size. It can be used to remove both of temporary hardness and alkalinity (carbonate, bicarbonate and hydroxide) from water. Its high surface area and short diffusion path offer higher operating capacity and faster kinetics. The macroporous structure makes it has good resistance to osmotic & mechanical shock and organic fouling. The weak acid functionality makes TC113DF has excellent regeneration efficiency. TC113DF in Hydrogen form is widely used in dealkalization and softening / demineralizing system to prolong the lifetime of strong acid cation resins. In Sodium form, TC113DF is also used for metals removal.

Basic Features:

Application:	Water softening, dealkalization and demineralization
Polymer matrix structure:	Macroporous acrylic crosslinked with divinylbenzene (DVB)
Appearance:	Light yellow, opaque, spherical beads
Functional Group:	Carboxylic acid
Ionic form as shipped:	H ⁺ or Na ⁺ when ordered as TC113DF-Na

Physical and Chemical Properties:

NO.	ITEM	SPEC	
1	Total exchange capacity (eq/L)	≥4.4	
2	Moisture retention (%)	45-52	
3	Particle size range (%)	0.20-0.56 mm≥95	
4	Whole uncracked beads after attrition (%)	≥96	
5	Shipping weight (g/ml)	0.74-0.80	
6	Specific gravity (g/ml)	1.14-1.20	
7	Effective size (mm)	0.25 - 0.35	
8	Uniformity coefficient	<1.4	
9	Reversible swelling,	H ⁺ → Na ⁺ (%)	<65
		H ⁺ → Ca ²⁺ (%)	<25

Suggested Operating Conditions:

NO.	ITEM	SPEC
1	Max operating temperature	120 °C
2	PH range	5-14
3	Service flow rate	5-40 BV/h
4	Regenerant	3-6% HCl, 0.5-0.8% H ₂ SO ₄