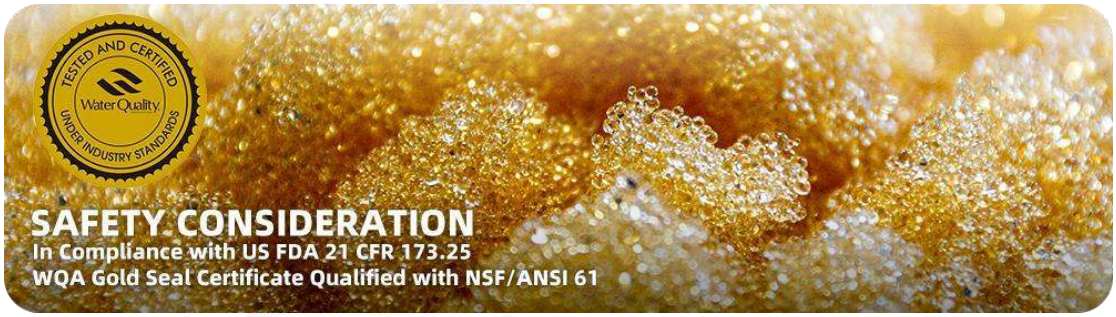
Lanlang® TC007FG

Food Grade gel type strong acid cation exchange resin
Used for softening potable water and water for foods and beverages.



PRODUCT DESCRIPTION

Lanlang ® TC007FG Is a premium food grade gel type strong acid cation exchange resin produced by sulfonated styrene-divinylbenzene (DVB) copolymers in standard Gaussian size distribution. TC007FG is in compliance with US FDA 21 CFR 173.25 and NSF/ANSI 61 qualified with WQA Gold Seal Certificate. It has excellent chemical, physical and thermal stability. Its good ion exchange kinetics gives high efficiency for uses in both regenerable softeners and non-regenerable cartridges.

BASIC FEATURES

Application:	Water softening for potable water, foods and beverages
Polymer matrix structure:	Gel polystyrene crosslinked with divinylbenzene (DVB)
Appearance:	Amber, spherical beads
Functional Group:	Sulphonic acid
Ionic form as shipped:	Na^+

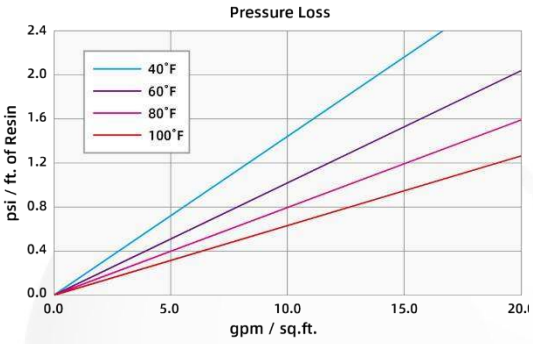
SUGGESTED OPERATING CONDITIONS

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

PHYSICAL AND CHEMICAL PROPERTIES

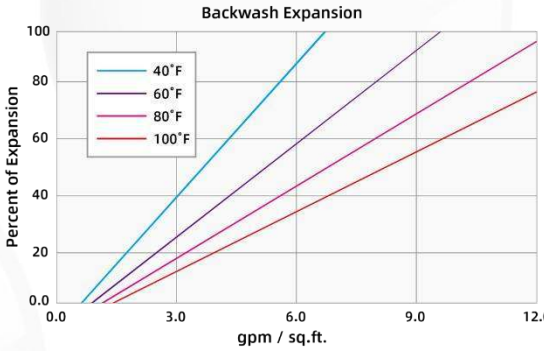
NO.	ITEM		SPEC
1	Total exchange capacity (eq/L)		≥1.9
2	Moisture retention (%)		45-53
3	Particle size range (%)		0.315-1.25mm≥95
4	Whole uncracked beads after attrition (%)		≥96
5	Shipping weight (g/ml)		0.77-0.87
6	Specific gravity (g/ml)		1.25-1.29
7	Effective size (mm)		0.4 - 0.6
8	Uniformity coefficient		<1.7
9	Reversible swelling, $Ca^{2+} \rightarrow Na^{+}$ (%)		<8
10	Free moisture (%)		<2
Extractive test (special for food grade resins)			
11	pH		7.0-9.0
12	Color throw (APHA)	1 hour	< 10
		24 hours	< 30
13	Odor		0-1
14	Extractable residue (%)		< 0.1
15	TOC (mg/l)		0 - 30
16	TN (mg/l)		0 - 15

HYDRAULIC PROPERTIES



PRESSURE LOSS

The graph above shows the expected pressure loss of Lanlang TC007FG per foot of bed depth as a function of flow rate at various temperatures.



BACKWASH

The graph above shows the expansion characteristics of Lanlang TC007FG as a function of flow rate at various temperatures.