



PUREFLOW® PFRESINC010NA

High cross linkage gel type strong acid cation exchange resin

Used for water softening and demineralization, high oxidant tolerance.



PRODUCT DESCRIPTION

PUREFLOW® PFRESINC010NA is a premium grade gel type strong acid cation exchange resin produced by sulfonated styrene-divinylbenzene (DVB) copolymers with high cross linkage at 10%. Its high cross linkage makes it has excellent resistance to attrition and oxidative degradation. It has excellent chemical, physical and thermal stability, and high exchange capacity. TC010 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, high oxidant tolerance
Polymer matrix structure:	Gel polystyrene crosslinked with divinylbenzene (DVB)
Appearance:	Amber, spherical beads
Functional Group:	Sulphonic acid
Ionic form as shipped:	Na ⁺

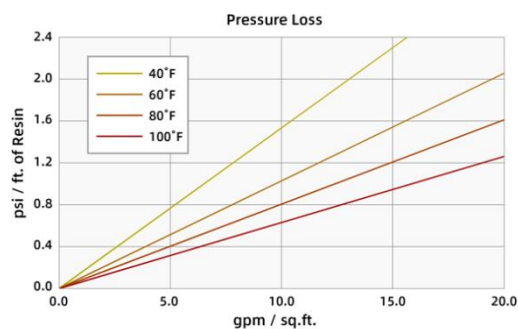
SUGGESTED OPERATING CONDITIONS

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

PHYSICAL AND CHEMICAL PROPERTIES

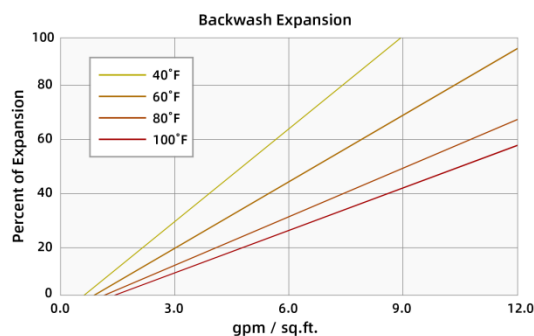
NO.	ITEM	SPEC
1	Total exchange capacity (eq/L)	≥2.2
2	Moisture retention (%)	38-43
3	Particle size range (%)	0.315-1.25mm≥95
4	Whole uncracked beads after attrition (%)	≥90
5	Shipping weight (g/ml)	0.80-0.88
6	Specific gravity (g/ml)	1.28-1.32
7	Effective size (mm)	0.4 - 0.6
8	Uniformity coefficient	<1.7
9	Reversible swelling, $\text{Ca}^{2+} \rightarrow \text{Na}^{+}$ (%)	<8
10	Free moisture (%)	<2

HYDRAULIC PROPERTIES



PRESSURE LOSS

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



BACKWASH

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