

# WK 100x10 Softener Resin

WK100x10 IS A MULTIPURPOSE, PREMIUM GRADE, STRONG ACID CATION EXCHANGE RESIN  
WK100x10 IS SUITED FOR SOFTENING, AND CHEMICAL PROCESSING APPLICATIONS. IT IS SUITABLE  
FOR AGGRESSIVE OPERATING CONDITIONS AND CAN BE USED IN A WIDE RANGE OF TEMPERATURE AND  
PH CONDITIONS.

## OPERATING CONDITIONS

Maximum Operating Temp:	250°F (120°C) in H+ form 280°F (140°C) in Na+ Form: Shipped in Sodium Form
Resin bed Depth:	24"(600 mm) to 36"(900 mm)
Maximum Service Flow:	15 gpm/ft <sup>3</sup> (120M <sup>3</sup> /Hr/M <sup>3</sup> )
Backwash Expansion space:	40 to 75%
Backwash flow Rate for 40 to 75% expansion at 77°F (25°C)	4 to 10 gpm/ft <sup>2</sup> (9 to 25 M <sup>3</sup> /Hr/M <sup>2</sup> )
Regenerant:	NaCl for Na+ form.
Regeneration level:	3.7 to 10.0 lbs NaCl/ft <sup>3</sup> (60-160 g NaCl/l)
Regenerant concentration:	5.0 to 15.0% for NaCl
Regeneration flow rate:	0.25 to 2 gpm/ ft <sup>3</sup> (2 to 16 M <sup>3</sup> /Hr/M <sup>3</sup> )
Regeneration time:	20-60 minutes
Fast Rinse:	At service flow rate
Slow Rinse:	At regeneration flow rate
Rinse Volume:	25 to 40 gal/ft <sup>3</sup> (3 to 5 M <sup>3</sup> /M <sup>3</sup> )

## INFLUENT LIMITATIONS

Free Chlorine:	Not traceable
Turbidity:	Less than 2 N.T.U
Iron and Heavy metals:	Less than 0.1 ppm

## WK 100X10 RESIN CHARACTERISTICS

Type	Strong acid cation exchange resin
Matrix Structure	Cross linked polystyrene <b>(10%)</b>
Functional group	Sulphonic acid
Physical form	Moist spherical beads
Ionic form	Hydrogen/ Sodium (WK102 is shipped in the sodium form)
Particle Size	0.3-1.2mm
Screen Size U.S.S (wet)	16-50
Total Exchange capacity	2.1 meq/ml (Na <sup>+</sup> ) form / 1.8 meq/ml (H <sup>+</sup> )
Swelling (approx.)	Na <sup>+</sup> to H <sup>+</sup> 6%
Moisture content (approx.)	48% (Na <sup>+</sup> )
Backwash settled density	52 to 55 lbs/ft <sup>3</sup> (840 to 880 g/l) in Na <sup>+</sup> form
Operating pH range	0-14
Solubility	Insoluble in all common solvents
Shipping weight	0.86 Kg/l (approx.) in Na <sup>+</sup> form (51 – 53 lbs/ ft <sup>3</sup> )

<b>RESIN PACKS – WK 100X10 RESIN</b>							
<b>PART NO</b>	<b>DESCRIPTION</b>		<b>TANK (1) 9x48 10x54</b>		<b>RESIN CUBIC FT</b>	<b>GRAVEL CUBIC FT (2)</b>	<b>WEIGHT POUNDS</b>
479900-10	RESIN PK	30	10X54	F	1	0.15	70
479901-10	RESIN PK	45	10X54	F	1 1/3	0.15	90
479902-10	RESIN PK	50	12X52	F	1 1/2	0.15	90
479903-10	RESIN PK	70	13X54	F	2 1/4	0.30	150
479904-10	RESIN PK	100	14X65	F	3 1/4	0.40	210
479905-10	RESIN PK	120	16X65	F	4	0.55	260
479906-10	RESIN PK	150	21X62	F	5	1.40	390
479907-10	RESIN PK	240	24X72	F	8	2	600
479908-10	RESIN PK	300	30X72	F	10	2 1/2	750
479909-10	RESIN PK	450	36X72	F	15	3	1050
479921-10	RESIN PK	120	18X54	S	4	1	300
479922-10	RESIN PK	150	20X54	S	5	1	350
479923-10	RESIN PK	180	20X54	S	6	1	400
497724-10	RESIN PK	200	24X54	S	6 2/3	1 1/2	490
479925-10	RESIN PK	225	24X54	S	7 1/2	1 1/2	530
479926-10	RESIN PK	240	24X54	S	8	1 1/2	550
479927-10	RESIN PK	300	30X60	S	10	2 1/2	750
479928-10	RESIN PK	450	30X60	S	15	2 1/2	1000
479929-10	RESIN PK	600	36X60	S	20	3 1/2	1350
479930-10	RESIN PK	750	36X72	S	25	3 1/2	1600
479931-10	RESIN PK	900	42X72	S	30	5	2000
479932-10	RESIN PK	1200	48X72	S	40	11	3100
479933-10	RESIN PK	1650	54X72	S	55	13	4050
479934-10	RESIN PK	2100	60X72	S	70	16	5100
479935-10	RESIN PK	2550	66X72	S	85	21	6350
479936-10	RESIN PK	3000	72X72	S	100	26	7600
480000-1	SOFTENER	RESIN	WK100	-	1	0	52
480012	GRAVEL	#20	-	-	0	1	100
480000-1	RESIN	PALLET			40	0	2080

**NOTES:**

F - FIBERGLASS OR POLY GLASS TANKS  
 S - STEEL TANKS  
 GRAVEL WEIGHT IS 100 POUNDS PER  
 CUBIC FT.

