KT-225

Ion Exchange Water Softener Resin



KT-225 is a high capacity premium grade bead form conventional gel polystyrene sulphonate cation exchange resin designed for use in industrial or house hold water conditioning equipment, Its acidity is similar to some inorganic acids, such as sulfuric acid [H2SO4] and hydrochloric acid [HCI]. It can be used as ion exchanger in alkaline, neutral and acidic medium. This product has speedy exchange ability and good physical strength.





TYPICAL PHYSICAL AND CHEMICAL PROPERTIES:

	Parameter	Specification
0	Polymer Matrix Structure	Crosslinked Polystyrene Divinylbenzene
0	Physical Form and Appearance	Yellow to Brown yellow color beads
0	Functional Groups	R-SO3 ⁻
0	Ionic Form ,as shipped	Na+
0	Total Capacity, Na+ form, wet, volumetric	≥2.0eq/l min
0	Moisture Retention, Na+ form	45-50%
0	Particle Size Range	0.4mm-1.2mm
0	<300 μm (max.)	1%
0	Uniformity Coefficient (max.)	1.6
0	effective size	0.4-0.7mm
0	Reversible Swelling Na+ \rightarrow H+ (max.)	9%
0	Reversible Swelling Ca2+→Na+(max.)	6%
0	Shipping Weight (approx.)	750 -850g/l
0	Specific Gravity, moist Na+ Form	1.24-1.28
0	Temperature Limit	120°C (250 °F)
0	pH Range, Stability	0 - 14

SUGGESTED OPERATING CONDITION:

•	Maximum Temperature Na+ Form	120°C (248oF) max.
•	Maximum Temperature H+ Form	100°C (212oF) max
•	Backwash Rate	25 to 50% Bed Expansion
•	Regenerant Concentration : Hydrogen Cycle	3% HCl or 2 to 3% H2SO4
•	Regenerant Concentration : Sodium Cycle	6% to 8% NaCl or 3% NaOH
•	Regenerant dosage : HC1 or H2SO4	HC1 or H2SO4 volume:resin volume =3:1
•	Regenerant dosage : NaCl	NaCl volume:resin volume =2:1
•	Regenerant dosage : NaOH	NaOH volume:resin volume =3:1
•	Regenerant Flow Rate	2 to 4 BV/h
•	Regenerant contact Time	At least 40 minutes
•	Service Flow Rate	10-25m/h

APPLICATIONS

- It is used in hard water softening
- Pure water manufacturing
- O Hydro-metallurgy, rare elements separation
- O Aminophenol extracting it is widely used in water treatment
- Sugar manufacturing, pharmacy
- Monosodium glutamate
- Hydro-metallurgy industries and so on