ANION EXCHANGE RESIN TOKEM–822

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Strong base anion exchange resin (porous type) with high capacities and osmotic stability. It ensures more efficient removal of organic molecules in comparison with gel products.

GENERAL DESCRIPTION	
Matrix	Styrene–DVB
Functional group	quaternary ammonium basicgroups (type 2)
Polymer structure	porous
Ionic form	Cl^- chloride

Application area:

- in desalination plants where sorption of all acid anions are carried out at one stage anionization;
- in conventional co-current water treatment systems for treating water with high content of mineral acid radicals and organic substances but with low content of silicic and carbon acids as a protection from organic compounds.

Physical and Chemical Characteristics:

CHARACTERISTICS	STANDARD VALUE
Appearance	Spherical opaque beads, white to light yellow
Partcile size range, mm	0.315–1.250
Volume of effective size fraction, % min	95
Effective particle size, mm	0.5–0.6
Uniformity coefficient, max	1.6
Moisture retention in Cl^- form, %	47–57
Osmotic stability, %, min	96
Total capacity in OH^- form, mmol/cm^3 (mg–eq/cm^3), min	1.0
Shipping weight in Cl^- form, g/cm^3	0.68–0.74
Particle density in Cl^- form, g/cm^3	1.07–1.10

Processing Characteristics:

SUGGESTED OPERATING CONDITIONS AND MODES:	
Bed depth min, mm	800
Temperature limit, ℃ Cl^- form OH^- form	 80 30
p H limit	0-11
Swelling at $Cl^- \rightarrow OH^-$, %	12
Regenerant, %:	(4-5) NaOH
Total rinse requirement, BV	4-7
Backwashing bed expansion, %	80-100