

## **ANION EXCHANGE RESIN TOKEM-802**

TR 2227-037-72285630-2014

Strong base anion exchange resin (gel type) with high total and dynamic capacity, osmotic and mechanical stability. It differs from type 1 for more efficient regeneration due to its more available functional groups.

GENERAL DESCRIPTION		
Matrix	Styrene-DVB	
Functional group	quaternary ammonium basic groups (type 2)	
Polymer structure	gel	
Ionic form	Cl <sup>-</sup> chloride	

## Application area:

- in desalination units where sorption of all acid anions are carried out at the single anionization stage;
- in conventional co-current water treatment systems for treating water with high content of mineral acid radicals but with low content of silicic and carbon acids.

## Physical and Chemical Characteristics:

CHARACTERISTICS	STANDARD VALUE
Appearance	Spherical beads, white to light yellow in colour
Particle size range, mm	0.315-1.250
Volume of effective size fraction, % min	95
Effective particle size, mm max	0.5-0.6
Uniformity coefficient, max	1.6
Moisture retention, %	45–55
Osmotic stability, %, min	96
Total capacity, mmol/cm³ (mg-eq/cm³), min	1.0
Shipping weight, g/cm <sup>3</sup>	0.68-0.75
Particle density, g/cm <sup>3</sup>	1.07-1.10

## **Processing Characteristics:**

SUGGESTED OPERATING CONDITIONS AND MODES:		
Bed depth min, mm	800	
Pressure drop coefficient, kPa · h/m²	1.35	
Temperature limit, ℃		
CI <sup>-</sup> form	80	
OH <sup>-</sup> form	40	
pH limit	0-11	
Swelling at Cl <sup>-</sup> → O H <sup>-</sup> , %	15	
Regenerant, %	4 NaOH	
Total rinse requirement, BV	2-8	
Backwashing bed expansion, %	80-100	