

# **ANION EXCHANGE RESIN TOKEM-801**

TR 2227-025-72285630-2011

High capacity strong base anion exchange resin (gel type) with improved particle range composition and osmotic stability.

It effectively removes silicic acid and acid anions from water. Optimal polymer matrix cross-link provides for high exchange kinetics, as well as efficient and economical regeneration of the anion exchange resin.

GENERAL DESCRIPTION	
Matrix	styrene-DVB
Functional group	quaternary ammonium basic groups (type 1)
Polymer structure	gel
lonic form	Cl <sup>-</sup> chloride OH <sup></sup> hydroxyl

## **Application area:**

This anion exchange resin can be applied in all conventional ion exchange processes, including:

- water desalination at thermal power stations and boiler houses;
- processing medium and waste water treatment;
- separation and exclusion of non-ferrous metals.

## **Physical and Chemical Characteristics:**

CHARACTERISTICS	STANDARD VALUE
Appearance	Spherical beads, white to brown in colour
Particle size range, mm	0.40-1.25
Volume of effective size fraction, % min	96
Effective particle size, mm max	0.6
Uniformity coefficient, max	1.6
Moisture retention in $CI^{-}$ form, %	46-52
Osmotic stability, %, min	95
Oxidation of product in oxygen equivalent, mg/l, max	0.55
Total capacity in OH <sup>-</sup> form, mmol/cm3 (mg-eq/cm3), min	1.0
Total uncracked beads as shipped, %, min	95



#### Table con'd (Physical and Chemical Characteristics)

Shipping weight Cl <sup>-</sup> form, g/cm <sup>3</sup>	0.66-0.73
Particle density in Cl <sup>-</sup> form, g/cm <sup>3</sup>	1.03-1.09

#### **Processing Characteristics:**

SUGGESTED OPERATING CONDITIONS AND MODES:		
Bed depth min, mm	800	
Pressure drop coefficient, kPa·h/m <sup>2</sup>	1.35	
Temperature limit, °C Cl <sup>-</sup> form OH <sup>-</sup> form	80 60	
pH limit	0-14	
Swelling at $C\Gamma \rightarrow OH^{-}$ , %	30	
Regenerant, %	(3-4) NaOH	
Total rinse requirement, BV	2-5	
Backwashing bed expansion, %	80-100	