

## CATION EXCHANGE RESIN TOKEM-150

TR 2227-023-72285630-2011

High capacity strong acid cation exchange resin of gel type. It is characterized with high chemical and osmotic stability. Its specific production technology minimizes mineral and organic impurities.

GENERAL DESCRIPTION	
Matrix	Styrene-DVB
Functional group	Sulfonic acid
Polymer structure	gel
Ionic form	Na+ Sodium

### Application area:

– treatment of residential and potable water.

### Physical and Chemical Characteristics :

CHARACTERISTICS	STANDARD VALUE
Appearance	Spherical beads, yellow to dark brown in colour
Particle size range, mm	0.315–1.250
Effective particle size, mm	0.40–0.55
Volume of effective size fraction, % min	96
Uniformity coefficient, max	1.7
Moisture retention, %	43–53
Total capacity, mmol/cm <sup>3</sup> (mg-eq/cm <sup>3</sup> ), min	1.9
Osmotic stability, %, min	96
Permanganate demand of aqueous extract in oxygen equivalent, mg/dm <sup>3</sup> , max: at 20°C at 80°C	4 10
Odour intensity of water filter at 100 ° C, units, max	1
Colour, degree, max	20
Turbidity, FTU, max	2.6
Hydrogen index, pH units	7–9



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

Shipping weight, g/cm <sup>3</sup>	0.80-0.85
Particle density, g/cm <sup>3</sup>	1.25-1.29

**Processing Characteristics:**

<b>SUGGESTED OPERATING CONDITIONS AND MODES:</b>	
Bed depth min, mm	800
Pressure drop coefficient, kPa · h/m <sup>2</sup>	1.35
Temperature limit, °C	120
p H limit	0-14
Swelling	
at H <sup>+</sup> → Na <sup>+</sup> , %	5-8
at Na <sup>+</sup> → Ca <sup>+</sup> , %	3-4
Regenerant, %	(6-10) NaCl
Total rinse requirement, BV	3-5
Backwashing bed expansion, %	50-80