



## 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 <sup>+</sup> 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	4
at 80 °C	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:**

**SUGGESTED OPERATING CONDITIONS AND MODES:**

Bed depth min, mm	800
Pressure drop coefficient, kPa·h/m <sup>2</sup>	1.35
Temperature limit, ° C	120
pH 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