



## ANION EXCHANGE RESIN TOKEM-900

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Strong base anion exchange resin (gel type). Efficient scavenger for organics. Owing to its acryl structure, the anion exchange resin easily absorbs and desorbs organic molecules. It is resistant to organic compound impact.

High exchange capacity, mechanical and osmotic stability make this resin indispensable for desalination systems, particularly if a minimum slip of silicic acid is required.

### GENERAL DESCRIPTION

Matrix	acryl-DVB
Functional group	quaternary and tertiary ammonium basic groups (type 1)
Polymer structure	gel
Ionic form	Cl <sup>-</sup> chloride

### Application area:

In Cl<sup>-</sup> form it is applied as a scavenger for organics to protect the downstream anion exchange filter from organic poisoning.

In OH<sup>-</sup> form it is applied in conventional co-current water treatment systems for efficient removal of silicic ions.

### Physical and Chemical Characteristics:

CHARACTERISTICS	STANDARD VALUE
Appearance	Spherical transparent beads, white to light yellow
Particle size range, mm	0.315-1.250
Volume of effective size fraction, % min	95
Effective particle size, mm	0.5-0.7
Uniformity coefficient, max	1.6
Moisture retention in Cl <sup>-</sup> form, %	54-64
Osmotic stability, %, min	96
Total capacity in OH <sup>-</sup> form, mmol/cm <sup>3</sup> (mg-eq/cm <sup>3</sup> ), min	1.0
Shipping weight, g/cm <sup>3</sup>	0.65-0.75
Particle density, g/cm <sup>3</sup>	1.05-1.10



### Processing Characteristics:

#### SUGGESTED OPERATING CONDITIONS AND MODES:

Bed depth min, mm	800
Temperature limit, ° C	
Cl <sup>-</sup> form	40
OH <sup>-</sup> form	30
pH limit	0-14
Swelling at Cl <sup>-</sup> → OH <sup>-</sup> , %	25
Regenerant, %	
Cl <sup>-</sup> form	10 NaCl + (1-2) NaOH
OH <sup>-</sup> form	(2-4) NaOH
Total rinse requirement, BV	6-10
Backwashing bed expansion, %	80-100