

## ANION EXCHANGE RESIN TOKEM-820

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Strong base macroporous anion exchange resin with high exchange capacity and osmotic stability.

GENERAL DESCRIPTION	
Matrix	Polyacrylic
Functional group	quaternary ammonium basic groups (type 1)
Polymer structure	porous
Ionic form	Cl <sup>-</sup> chloride    OH <sup>-</sup> hydroxylic

### Application area:

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

In OH<sup>-</sup> form:

- in conventional co-current water treatment systems for efficient removal of silicic ions;
- for condensate polishing.

### Physical and Chemical Characteristics:

CHARACTERISTICS	STANDARD VALUE
Appearance	Spherical opaque beads, white to light yellow
Particle size range, mm	0.315-1.250
Volume of effective size fraction, % min	95
Effective particle size, mm	0.5-0.6
Uniformity coefficient, max	1.6
Moisture retention in Cl <sup>-</sup> form, %	50-60
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 in Cl <sup>-</sup> form, g/cm <sup>3</sup>	0.65-0.73
Particle density in Cl <sup>-</sup> form, g/cm <sup>3</sup>	1.05-1.10



**Processing Characteristics:**

<b>SUGGESTED OPERATING CONDITIONS AND MODES:</b>	
Bed depth min, mm	800
Temperature limit, °C	
Cl <sup>-</sup> form	80
OH <sup>-</sup> form	60
p H limit	0-12
Swelling at Cl <sup>-</sup> → OH <sup>-</sup> , %	20
Regenerant, %:	
Cl <sup>-</sup> form	10 NaCl + (1-2) NaOH
OH <sup>-</sup> form	(3-4) NaOH
Total rinse requirement, BV	4-7
Backwashing bed expansion, %	80-100