

# ANION EXCHANGE RESIN TOKEM-920

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Macroporous strong base anion exchange resin. 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.

## GENERAL DESCRIPTION

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

### 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 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	0.4-0.7
Uniformity coefficient, max	1.6
Moisture retention, %	66-72
Osmotic stability, %, min	90
Total capacity in OH <sup>-</sup> form, mmol/cm <sup>3</sup> (mg-eq/cm <sup>3</sup> ), min	0.7
Shipping weight, g/cm <sup>3</sup>	0.65-0.73
Particle density, g/cm <sup>3</sup>	1.04-1.10



### 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	(3-4) NaOH
Total rinse requirement, BV	6-10
Backwashing bed expansion, %	80-100