

CATION EXCHANGE RESIN TOKEM-145-10

TR 2227-042-72285630-2015

Strong acid cation exchange resin (gel type). It is characterized with uniform particle range composition and high conversion to H⁺ form.

GENERAL DESCRIPTION	
Matrix	Styrene-DVB
Functional group	Sulfonic Acid
Polymer structure	gel
Ionic form	H ⁺ Hydrogen

Application area (according to Standard Protocol RD EO 1.1.2.25.0161-2009 and Industrial Standard STO 1.1.1.02.013.0715-2009):

- for using in cation exchange filters of special water treatment SVO-3,6 (advanced water product treatment), 7 in SCWR reactors;
- for using in cation exchange filters of special water treatment SVO-5 in SCWR reactors in ammonia-hydrazine regime;
- for using in cation exchange regeneration filters of special water treatment SVO in LWGR reactors;
- for using in mix bed regeneration filters of special water treatment SVO in LWGR reactors together with anion exchange resin TOKEM-845;
- for using in mix bed filters of condensate polishing systems in LWGR reactors together with anion exchange resin TOKEM-845;
- for using in mix bed filters of water purification plants together with anion exchange resin TOKEM-845.

Physical and Chemical Characteristics (according to Industrial Standard STO 1.1.1.07.003.0368-2011):

CHARACTERISTICS	STANDARD VALUE
Appearance	Spherical beads, yellow to dark brown
Mean particle size, mm	0.65 ± 0.05
Uniformity coefficient, max	1.1
Volume ratio of beads passing through N04 mesh, % max	1.0
Degree of conversion to H ⁺ form, % min	99
Osmotic stability, %, min	94
Total uncracked beads as shipped, %, min	98
Moisture retention, %	45-51
Total capacity, mmol/cm ³ (mg-eq/cm ³), min	2.0



Table con' d (Physical and Chemical Characteristics)

Mean mechanical toughness, g/bead, min	450
Particles with toughness below 200 g/bead, %, max	5
Difference between settling times of anion and cation resins, sec, min-max	7-10
Electrostatic coefficient, % max	20

* - If demanded by the customer in can be produced in Na+ form for application in mix bed filters SOSTG\COCTF
??? of SCWR reactors. In this case, quality indicators are to be discussed specially.