

CATION EXCHANGE RESIN TOKEM-105-10

TR 2227-042-72285630-2015

Strong acid cation exchange resin (gel type) with 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.

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 in colour |
| Particle size range, mm | 0.40-1.25 |
| Volume of effective size fraction, % min | 97 |
| Conversion to H ⁺ form, %, min | 99 |
| Total uncracked beads as shipped, %, min | 97 |
| Moisture retention, % | 45-51 |
| Osmotic stability, %, min | 94 |
| Total capacity, mmol/cm ³ (mg-eq/cm ³), min | 2.0 |
| Mean mechanical toughness, g/bead, min | 450 |
| Beads with toughness below 200 g/bead, %, max | 5 |