CLAIMS

WHAT IS CLAIMED IS:

1. A preparation method for a perfluoroelastomer product with a non-viscous surface, comprising the following steps:

S1, preparation of a perfluoroelastomer product: mixing raw perfluoroelastomer with a vulcanizing agent to obtain mixed rubber, and subjecting the mixed rubber to high temperature vulcanization to obtain the perfluoroelastomer product;

S2, surface treatment: carrying out surface roughening and degreasing treatment on the perfluoroelastomer product;

S3, one-step surface treatment: spraying or dipping a paint a obtained by uniformly mixing a tetrafluoroethylene-hexafluoropropylene copolymer (FEP) emulsion, an aqueous dispersion of polyethersulfone and SiO_2 on a surface of the perfluoroelastomer product, and carrying out heating to obtain a surface pretreated perfluoroelastomer product; and

S4, two-step surface treatment: spraying or dipping a non-viscous paint b on the surface of the surface pretreated perfluoroelastomer product, and carrying out heating to obtain the perfluoroelastomer product with a non-viscous surface;

wherein the perfluoroelastomer product has a surface roughness Ra of greater than 5 μm after the surface roughening treatment in S2;

the heating in S4 is carried out at a temperature of lower than 360°C;

raw materials for preparing the non-viscous paint b comprise fluororesin with a melting point of 250-350°C, and the form of the non-viscous paint b is a powder or an emulsion; and the fluororesin is FEP.

2. The preparation method for a perfluoroelastomer product with a non-viscous surface according to claim 1, wherein the vulcanizing agent comprises a combination of one or more of an organometallic compound and an amino-containing organic compound.

3. The preparation method for a perfluoroelastomer product with a non-viscous surface according to claim 1, wherein the heating temperature in S4 is 10-60°C higher than a melting point of a resin material contained in the non-viscous paint b.

4. The preparation method for a perfluoroelastomer product with a non-viscous surface according to claim 3, wherein the heating temperature in S4 is 20-50℃ higher than the melting point of the resin material contained in the non-viscous paint b.