

EXAMPLE 3

(Comparison from DE-A 3,532,686)

A basic component is prepared by mixing in a mixer 35 parts of vinyl-*endblocked* polydimethylsiloxane with a viscosity of 65,000 mPa.s, 30 parts of vinyl-*endblocked* polydimethylsiloxane with a viscosity of 1,000 mPa.s and 35 parts of polydimethylsiloxane which contains SiH groups and has a viscosity of 95 mPa.s and 1.0 mmol SiH/g.

The catalyst component is prepared by mixing in a mixer 35 parts of vinyl-*endblocked* polydimethylsiloxane with a viscosity of 65,000 mPa.s, 65 parts of vinyl-*endblocked* polydimethylsiloxane with a viscosity of 1,000 mPa.s, 0.2 parts of a platinum/siloxane complex and 0.05 parts of tetravinyltetramethyldisiloxane.

When the basic component is mixed with the catalyst component in the ratio 1:1 by weight the resulting SiH:SiVi ratio is 2.33:1.

EXAMPLE 4

The basic components were mixed with the particular-catalyst component in the ratio 1:1 by weight under vacuum. The mixtures were poured bubble-free into moulds with the negative of a DIN 53 504 test piece and into moulds with a diameter of 1 cm and a depth of 1 cm and crosslinked at 120° C. for 30 minutes. The Shore A hardness of the round test specimens was measured, and, based on DIN 53 504, the tear strength in N/mm² and the elongation at break in % were measured on the test pieces.

Example	Shore A	Tear strength [N/mm ²]	Elongation at break [%]
1	29	1.9	200
2	19	0.5	180
3	17	0.4	170

The contact lenses produced from these materials comply with the requirements on the radial stability (according to DIN 58224), display an excellent biological compatibility and have a very good weight constancy.

What is claimed is:

1. In an optically clear silicone composition which can be cured to an elastomer comprising

- a) an organopolysiloxane with two or more vinyl groups in the molecule,

- b) optionally an organopolysiloxane without reactive groups,
 c) an organopolysiloxane with two or more SiH groups in the molecule,
 d) a catalyst containing Pt metal or Pt metal complexes, and
 e) an inhibitor,

wherein the improvement comprises

the silicone composition additionally contains a low molecular weight tetrafunctional SiO_{4/2}—and monofunctional R₃SiO₂—containing resin which contains vinyl and ethoxy groups and is homogeneously soluble in a) and which resin, firstly, has a vinyl group content of 0.5–8 mmol/g, secondly, consists of SiO_{4/2}, RO₂ and R₃SiO₂ units, where R represents a methyl, vinyl, phenyl or ethyl group, and has an ethoxy group content of less than 4 mmol/g and, thirdly, is present in the silicone composition to the extent of 1–10% by weight,

the catalyst content—calculated as metal—is less than 5 ppm based on the total mixture,

the SiH group content is from 0.05 to 0.8 mmol/g based on the total mixture,

the inhibitor is an organopolysiloxane containing 0.5 to 11.6 mmol vinyl/g,

the specific gravity of the curable silicone composition is less than 1.0, and

the silicone composition optionally additionally contains branched saturated hydrocarbons with 15–50 C atoms.

2. Composition according to claim 1, containing 1.5–5% by weight of the tetrafunctional SiO_{4/2}—and monofunctional R₃SiO₂—containing resin.

3. Composition according to claim 1, wherein the SiH content is 0.1–0.5 mmol/g.

4. Contact optical article produced from composition according to claim 1.

5. Contact lens produced from compositions according to claim 1.

6. Scleral lens produced from compositions according to claim 1.

7. Intraocular lens produced from compositions according to claim 1.

8. A process for the production of a contact optical article, comprising introducing a composition according to claim 1 into a mold, and curing the composition at temperatures of 20° C. to 150°.

9. A process according to claim 8, further comprising subjecting the cured composition to an after treatment.

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