

Abstract

Title of the invention: Method for Fabricating Silicone-Containing Copolymer Molded Article Having Hydrophilic Surface and Silicone Hydrogel Contact Lens Having Hydrophilic Surface.

The present invention provides a silicone-containing copolymer molded article having a hydrophilic surface by means of the cast molding method and without employing a high-molecular-weight hydrophilic polymer even when employing a polypropylene mold. The silicone-containing copolymer molded article is prepared by polymerizing a monomer solution containing (a) a silicone monomer comprising a (meth)acryloyl group; (b) a hydrophilic monomer comprising a vinyl group; (c) a crosslinkable monomer; and (d) a polymerization initiator in a cavity of a mold having a hydrophobic cavity surface. The polymerization initiator has a 10-hour half-life temperature (T10) of 70 °C or higher than 100 °C or lower, and the polymerization is conducted by means of a step P1 of maintaining a temperature within a range of from the T10 of the polymerization initiator contained in the monomer solution to 35 °C below T10 for one hour or more; and a step P2 of maintaining a temperature higher than the T10 of the polymerization initiator contained in the monomer solution for one hour or more.

Fig. 1