

A SILICONE HYDROGEL LENS WITH A CROSSLINKED HYDROPHILIC COATING

Abstract

A cost-effective method for making a silicone hydrogel contact lens has a crosslinked hydrophilic coating applied thereon. The method involves heating a silicone hydrogel contact lens in an aqueous solution in the presence of a water-soluble, highly branched, thermally- crosslinkable hydrophilic polymeric material having positively-charged azetidinium groups, and at a temperature from 40 Centigrade to 140 Centigrade for a period of time sufficient to covalently attach the thermally-crosslinkable hydrophilic polymeric material onto the surface of the silicone hydrogel contact lens through covalent linkages each formed between one azetidinium group and one of the reactive functional groups on and/or near the surface of the silicone hydrogel contact lens, thereby forming a crosslinked hydrophilic coating on the silicone hydrogel contact lens. Such method can be advantageously implemented directly in a sealed lens package during autoclave.

No figure.