



The blocking group was then removed to yield the hydroxyethyl terminated 1,6-diene monomer 15. Like HEA its monofunctional analog, the cyclopolymerizable monomer was completely water soluble. The monomer was polymerized to a crosslinked glassy polymer which swells in water but not in dichloromethane. Aqueous solutions of the monomer can also be polymerized to produce hydrophilic gels which may be of utility in dental and medical applications.

While only certain preferred embodiments of this invention have been shown and described by way of illustration, many modifications will occur to those skilled in the art and it is, therefore, desired that it be understood that it is intended herein to cover all such modifications that fall within the true spirit and scope of this invention.

We claim:

1. A process for synthesizing multifunctional acrylate monomers and oligomers, comprising the steps of: providing a reactant acrylate compound selected from a group consisting of siloxane diacrylate, a polyethylene glycol diacrylate, an aromatic fluori-

nated diacrylate, and a hydroxylated aliphatic diacrylate; and

exposing the acrylate compound to reaction conditions comprising a temperature within the range of about 90° C. to about 95° C. for a time within about 6 hours to about 20 hours effective for resulting in multifunctional acrylate monomers and oligomers having predominant 1,6-arrangement of double bonds.

2. The process of claim 1 wherein said acrylate compound is siloxane diacrylate.

3. The process of claim 1 wherein said acrylate compound is aromatic fluorinated diacrylate.

4. The process of claim 1 wherein said acrylate compound is polyethylene glycol diacrylate.

5. The process of claim 1 wherein said acrylate compound is a hydroxylated aliphatic diacrylate.

6. The process of claim 1 wherein DMSO is used as a solvent.

7. The process of claim 3, wherein DMSO is used as a solvent.

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