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(54) Title: POLYMERS FOR CONTACT LENSES

(57) **Abstract:** The present invention relates to a polyurethane polymer compositions comprising poly(ethylene glycol) monoalkyl ether. The compositions may be either crosslinked (suitable for reaction cast moulding) or thermoplastic (suitable for injection and/or compression moulding). Either of the above varieties may contain carbinol terminated polydimethyl siloxane components. There is also provided a process for preparing such a polyurethane polymer composition. The invention also relates to a process for preparing a polyurethane xerogel in the form of a molded article, said process comprising the steps of: i. preparing a mixture of a. at least one poly(ethylene glycol) and/or at least one polyol or macropolyol having a functionality greater than 2, or a mixture of such polyols or macropolyols having a functionality of greater than 2, b. at least one di- or poly-isocyanate, c. optionally at least one OH-terminated chain extender, d. optionally an additional compound comprising at least one hydroxyl group and at least one primary or secondary amine group, and e. at least one poly(ethylene glycol) monoalkyl ether; ii. dispensing the reaction mixture formed in step i) into a mold; iii. allowing the reaction mixture to react and cure; iv. removing the molded article from the mold; and v. hydrating the molded article. Optionally the process may comprise the step of hydrating the molded article to form a hydrated article.



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Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) EPO-Internal, WPI Data		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
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X	EP 0 367 362 A2 (GRACE W R & CO [US]) 9 May 1990 (1990-05-09) page 1, lines 4-10,39-41,47-53; examples V,VII -----	1-18, 20-27 28-40
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