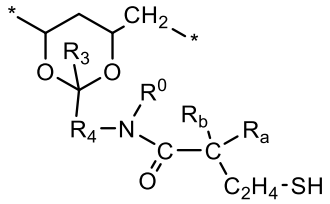
What is claimed is:

1. A lens-forming composition, comprising:
   (a) at least one lens-forming material,
   (b) at least one photoinitiator,
   (c) at least one thiol-containing compound or polymer in an amount for reducing the curing time of the lens-forming composition, with a light having a wavelength from about 380 to about 460 nm, compared to a control composition which differs from the lens-forming composition only in that the control composition is free of any chain-transfer agent while the lens-forming composition comprises said at least one thiol-containing compound or polymer,
   (d) at least one metal ion scavenger,
   (e) at least one free radical scavenger, and
   (f) optionally at least one polymerizable UV-absorbing component having at least one UV-absorbing moiety which absorbs UV radiation having a wavelength of from 200 nm to 400 nm,
   wherein the lens-forming composition has a pH of from about 2.5 to about 5 and a shelf life of at least 3 days.
2. The lens-forming composition of claim 1, wherein said at least one thiol-containing compound or polymer is selected from the group consisting of 2-mercaptoethylamine, 2-mercaptopropylamine, 3-mercaptopropylamine, 2-mercaptobutylamine, 3-mercaptobutylamine, 4-mercaptobutylamine, 5-mercaptopentylamine, 6-mercaptohexylamine, 1-amino-2-methyl-2-propanethiol hydrochloride, N-methylaminoethanethiol, N-ethylaminoethanethiol, N-methylaminopropanethiol, N-ethylaminopropanethiol, N-methylaminobutanethiol, N-ethylaminobutanethiol, 2-(butylamino)ethanethiol, thioglycolic acid, ammonium thioglycolate, thiolactic acid, mercaptosuccinic acid, meso-2,3-dimercaptosuccinic acid, 2-mercaptoisobutyric acid, 2-methyl-3-sulfanylpropanoic acid, 4-mercaptobutyric acid, 6-mercaptohexanoic acid, 8-mercaptooctanoic acid, 2-mercaptoethanol, 1-mercapto-2-propanol, 2,3-dimercapto-1-propanol, 1-thioglycerol, 3-mercapto-1-propanol, 4-mercapto-1-butanol, 3-mercapto-1-hexanol, 4-mercapto-4-methylpentan-2-ol, 6-mercapto-1-hexanol, 8-mercapto-1-octanol, 9-mercapto-1-nonanol, 2-mercapto-pyrimidine-4,6-diol; cysteine; 4-amino-5-mercapto-pentanoic acid, 2-mercapto-4-amino-6-hydroxypyrimidine, 2-mercapto-succinic acid, 3-mercapto-2-(methylamino)propanoic acid, 2-mercapto-4,5-dihydro-1h-imidazole-4,5-diol, 3-mercaptotyramine, mercaptopropanediol, 2-mercaptomethylglutaric acid, 3-mercapto-DL-valine hydrochloride, 2,2,2-trifluoroethanethiol, ethanethiol, 1,2-ethanedithiol, methyl thioglycolate, 2-

methoxyethanethiol, 2-propanethiol, 1,3-propanedithiol, N-acetylcysteamine, cysteamine, L-cysteine-methyl ester-HCl, 2-mercaptoethyl ether, 1-butanethiol, 2-methyl-1-propanethiol, 2-methyl-2-propanethiol, 1,4-butanedithiol, 2,2′-thiodiethanethiol, 4-cyano-1-butanethiol, 3-sulfanyl-2-pentanone, cyclopentanethiol, 2-(2-methoxyethoxy)ethanethiol, 2-methyl-1-butanethiol, 3-methyl-1-butanethiol, 1,5-pentanedithiol, 4-methyl-4-mercaptopentan-2-one, 3-mercapto-3-methyl-1-butyl-1-formate, 3-mercaptobutyl acetate, cyclohexanethiol, 1,6-hexanedithiol, 2-ethylhexanethiol, 1-nonanethiol, trimethylolpropane tris(3-mercaptopropionate), a poly(ethylene glycol) having one sole terminal thiol group, a poly(ethylene glycol) having two terminal thiol groups, a multi-arm poly(ethylene glycol) having one terminal thiol group at each arm, a polyvinyl alcohol having pendant thiol groups, and combinations thereof.

3. The lens-forming composition of claim 1, wherein said at least one thiol-containing compound or polymer comprises a thiol-containing polyvinyl alcohol which comprises at least about 50% by mole of repeating units of vinyl alcohol; and repeating units of formula (1)



(1)

in which: R^o and R_3 independent of each other are hydrogen or a C_1-C_6 alkyl group, R_4 is a C_2-C_6 alkylene divalent radical, R_a is hydrogen or methyl, and R_b is hydrogen, C_1-C_3 alkyl, acetyl, or C_2-C_4 alkanoylamino which optionally has a carboxyl group.

4. The lens-forming composition of claim 1, wherein said at least one metal ion scavenger is selected from the group consisting of ethylenediaminetetraacetic acid, diethylenetriamine penta(methylene phosphonic acid) and salts thereof, ethylenediamine tetra(methylene phosphonic acid) and salts thereof, hexamethylenediamine tetra(methylene phosphonic acid) and salts thereof, polyacrylic acid and salts thereof, and combinations thereof.

5. The lens-forming composition of claim 1, wherein said at least one free radical scavenger is selected from the group consisting of 4-Hydroxy-2,2,6,6-tetramethylpiperidine-1-oxyl, citric acid and salts thereof, ascorbic acid and salts thereof, and combinations thereof.

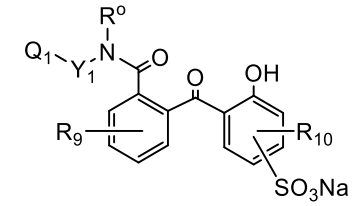
6. The lens-forming composition of claim 1, wherein the lens-forming composition comprises a UV-absorbing vinylic monomer in an amount to obtain the contact lens which has an UVB transmittance of about 10% or less between 280 and 315 nanometers and an UVA transmittance of about 30% or less between 315 and 380 nanometers.

7. The lens-forming composition of claim 1, wherein the lens-forming composition comprises

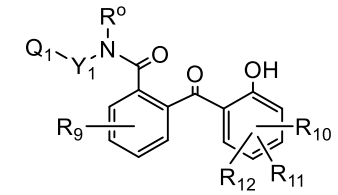
about 0.1% to about 3.0% by weight of said at least one polymerizable UV-absorbing component related to the amount of all polymerizable components in the lens-forming composition, wherein said at least one polymerizable UV-absorbing component is selected from the group consisting of 2-(2-hydroxy-5-vinylphenyl)-2H-benzotriazole, 2-(2-hydroxy-5-acrylyloxyphenyl)-2H-benzotriazole, 2-(2-hydroxy-3-methacrylamido methyl-5-tert octylphenyl) benzotriazole, 2-(2'-hydroxy-5'-methacrylamidophenyl)-5-chlorobenzotriazole, 2-(2'-hydroxy-5'-methacrylamidophenyl)-5-methoxybenzotriazole, 2-(2'-hydroxy-5'-methacryloxypropyl-3'-t-butyl-phenyl)-5-chlorobenzotriazole, 2-(2'-hydroxy-5'-methacryloxypropylphenyl) benzotriazole, 2-hydroxy-5-methoxy-3-(5-(trifluoromethyl)-2H-benzo[d][1,2,3]triazol-2-yl)benzyl methacrylate, 2-hydroxy-5-methoxy-3-(5-methoxy-2H-benzo[d][1,2,3]triazol-2-yl)benzyl methacrylate, 3-(5-fluoro-2H-benzo[d][1,2,3]triazol-2-yl)-2-hydroxy-5-methoxybenzyl methacrylate, 3-(2H-benzo[d][1,2,3]triazol-2-yl)-2-hydroxy-5-methoxybenzyl methacrylate, 3-(5-chloro-2H-benzo[d][1,2,3]triazol-2-yl)-2-hydroxy-5-methoxybenzyl methacrylate, 2-hydroxy-5-methoxy-3-(5-methyl-2H-benzo[d][1,2,3]triazol-2-yl)benzyl methacrylate, 2-hydroxy-5-methyl-3-(5-(trifluoromethyl)-2H-benzo[d][1,2,3]triazol-2-yl)benzyl methacrylate, 4-allyl-2-(5-chloro-2H-benzo[d][1,2,3]triazol-2-yl)-6-methoxyphenol, 2-{2'-Hydroxy-3'-*tert*-5'[3"-(4"-vinylbenzyloxy)propoxy]phenyl}-5-methoxy-*2H*-benzotriazole, 2-(5-chloro-2*H*-benzotriazol-2-yl)-6-(1,1-dimethylethyl)-4-ethenylphenol, 2-[2'-hydroxy-5'-(2-methacryloxyethyl)phenyl)]-2H-benzotriazole, 2-{2'-Hydroxy-3'-*tert*-butyl-5'-[3'-methacryloyloxypropoxy]phenyl}-*2H*-benzotriazole, 2-{2'-Hydroxy-3'-*tert*-butyl-5'-[3'-methacryloyloxypropoxy]phenyl}-5-methoxy-*2H*-benzotriazole, 2-{2'-Hydroxy-3'-*tert*-butyl-5'-[3'-methacryloyloxypropoxy]phenyl}-5-chloro-*2H*-benzotriazole, 2-[2'-Hydroxy-3'-*tert*-butyl-5'-(3'-acryloyloxypropoxy)phenyl]-5-trifluoromethyl-*2H*-benzotriazole, 2-(2'-hydroxy-5-methacrylamidophenyl)-5-methoxybenzotriazole, 2-(3-allyl-2-hydroxy-5-methylphenyl)-*2H*-benzotriazole, 2-(2-Hydroxy-3-methallyl-5-methylphenyl)-*2H*-benzotriazole, 2-3'-t-butyl-2'-hydroxy-5'-(3"-dimethylvinylsilylpropoxy)-2'-hydroxy-phenyl)-5-methoxybenzotriazole, 2-(2'-hydroxy-5'-methacryloylpropyl-3'-tert-butyl-phenyl)-5-methoxy-*2H*-benzotriazole, 2-(2'-hydroxy-5'-acryloylpropyl-3'-tert-butyl-phenyl)-5-methoxy-*2H*-benzotriazole, 2-Methylacrylic acid 3-[3-tert-butyl-5-(5-chlorobenzotriazol-2-yl)-4-hydroxyphenyl]-propyl ester-, 2-(3-(tert-butyl)-4-hydroxy-5-(5-methoxy-2H-benzo[d][1,2,3]triazol-2-yl)phenoxy)ethyl methacrylate2-(5-chloro-2*H*-benzotriazol-2-yl)-6-methoxy-4-(2-propen-1-yl), 2-[2-Hydroxy-5-[3-(methacryloyloxy)propyl]-3-*tert*-butylphenyl]-5-chloro-2*H*-benzotriazole,[[-]] and combinations thereof.

8. The lens-forming composition of claim 1, wherein the lens-forming composition comprises about 0.1% to about 3.0% by weight of said at least one polymerizable UV-absorbing

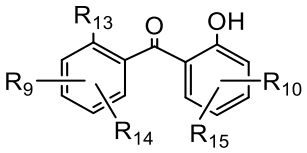
component related to the amount of all polymerizable components in the lens-forming composition, wherein said at least one polymerizable UV-absorbing component comprises a UV-absorbing vinylic monomer of any one of formula (VIII) to (XIV)



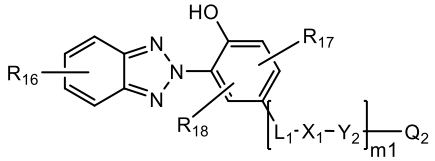
(VIII)



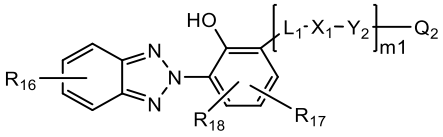
(IX)



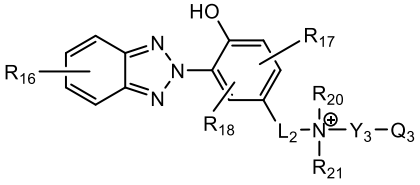
(X)



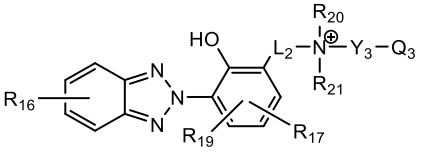
(XI)



(XII)



(XIII)



(XIV)

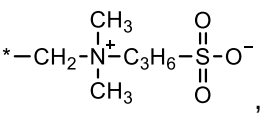
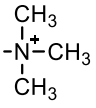
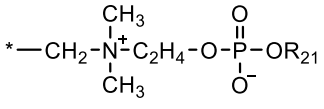
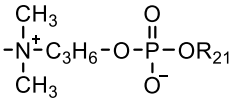
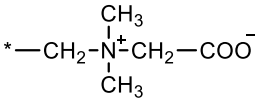
in which:

R^o is H, CH_3 or C_2H_5;

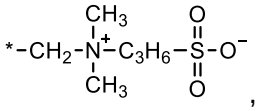
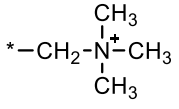
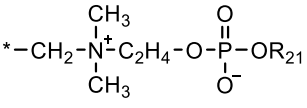
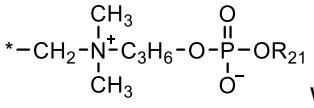
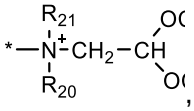
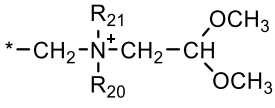
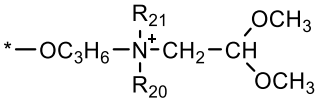
R^o is H, CH_3 or C_2H_5;

R_9, R_{10} and R_{17} independent of one other are H, CH_3, CCl_3, CF_3, Cl, Br, NR'R'' in which R' and R'' independent of each other are H or C_1-C_4 alkyl, OH, or OCH_3;

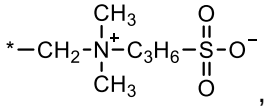
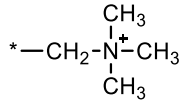
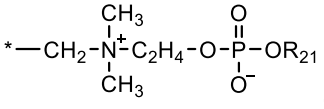
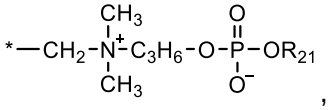
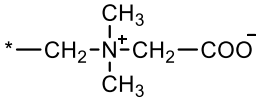
R_{11} and R_{12} independent of each other are H or a first hydrophilic group which is

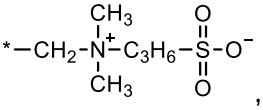
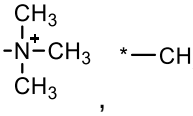
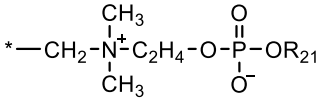
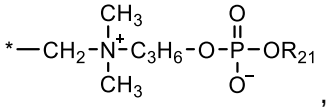
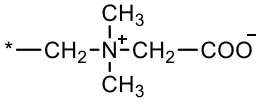
*–CH_2–$(OC_2H_4)_{n1}$–OCH_3, *–CH_2–$(OC_2H_4)_{n1}$–OH, , , , , or , provided that at least one of R_{11} and R_{12} is the first hydrophilic group;

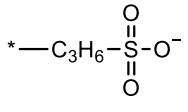
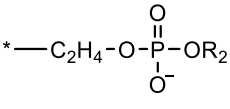
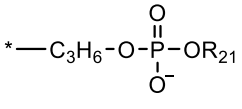
R_{13} is H, *–COOH, *–CONH-C_2H_4–$(OC_2H_4)_{n1}$–OCH_3, or *–CONH-C_2H_4–$(OC_2H_4)_{n1}$–OH;

one of R_{14} and R_{15} is H or a second hydrophilic group which is *–CH_2–$(OC_2H_4)_{n1}$–OCH_3, *–CH_2–$(OC_2H_4)_{n1}$–OH, , , , or  while the other of R_{14} and R_{15} is ,  or ;

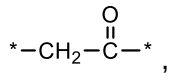
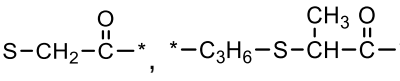
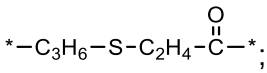
R_{16} independent of each other are H, CH_3, CCl_3, CF_3, Cl, Br, $NR_1'R_1''$ in which R_1' and R_1'' independent of each other are H or C_1-C_4 alkyl, OH, OCH_3, SO_3H, or $SO_3^-Na^+$;

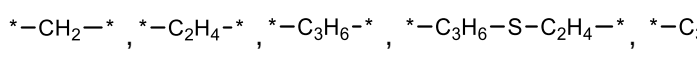
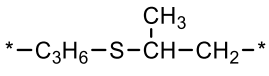
R_{18} is SO_3Na, , , , , or ;

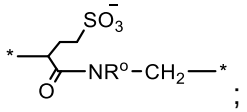
R_{19} is H, SO_3Na, , , , , or ;

R_{20} is CH_3, C_2H_5, , , or ;

R_{21} is methyl or ethyl;

L1 is a linkage of , , , or ;

L2 is a linkage of , or ;

L3 is a linkage of or ;

X1 is O or NR^o;

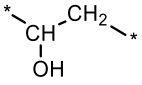
Y_1, Y_2, and Y_3 independent of one another are a C_2-C_4 alkylene divalent radical;

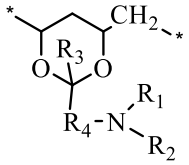
Q1, Q2, and Q3 independent of one another are a (meth)acryloylamido or (meth)acryloyloxy group;

m1 is zero or 1, provided that if m1 is zero, then Q_2 is a (meth)acryloylamido group; and

n1 is an integer of 2 to 20.

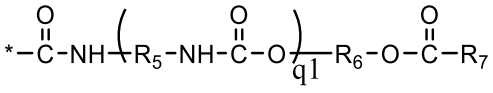
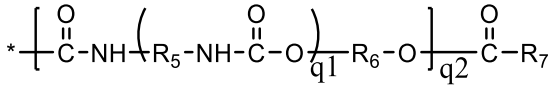
9. The lens-forming composition of claim 1, wherein the lens-forming material comprises a water-soluble prepolymer.

10. The lens-forming composition of claim 9, wherein the water-soluble prepolymer is a crosslinkable polyvinyl alcohol prepolymer which repeating units of vinyl alcohol of  and repeating units of formula (I)

 (I)

in which:

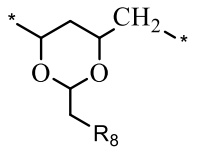
R_1 is hydrogen or C_1-C_6 alkyl;

R_2 is an ethylenically unsaturated group of  or  in which q1 and q2 independently of each another are zero or one, and R_5 and R_6 independently of each another are a C_2-C_8 alkylene divalent radical, R_7 is C_2–C_8 alkenyl;

R_3 can be hydrogen or a C_1-C_6 alkyl group; and

R_4 is a C_1-C_6 alkylene divalent radical.

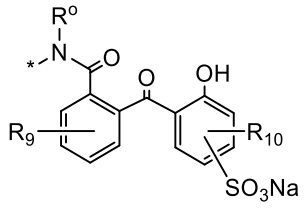
11. The lens-forming composition of claim 10, wherein the crosslinkable polyvinyl alcohol prepolymer further comprises UV-absorbing repeating units, each of which is a repeating unit of formula (II)



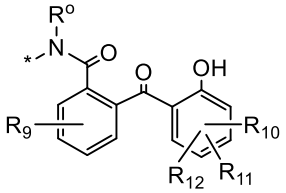
(II)

in which:

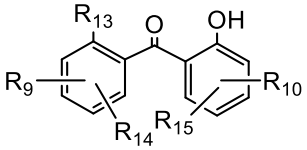
R_8 is a monovalent radical of any one of formula (III)-(VII)



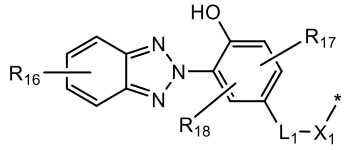
(III)



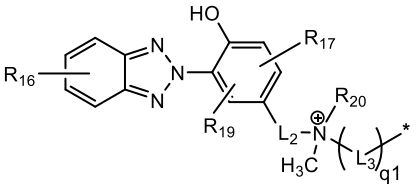
(IV)



(V)



(VI)



(VII)

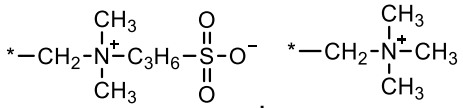
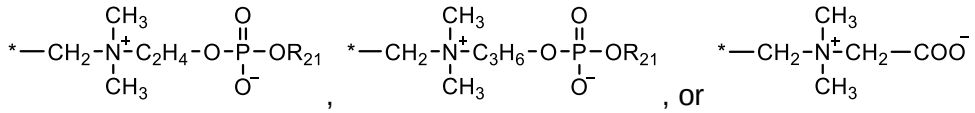
in which:

q1 is zero or 1;

R^o is H, CH_3 or C_2H_5;

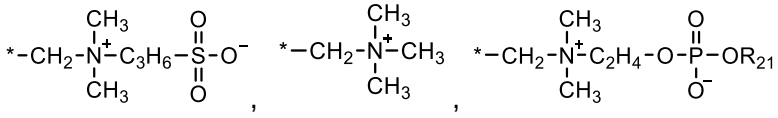
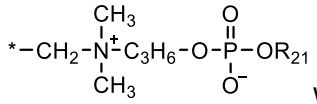
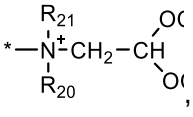
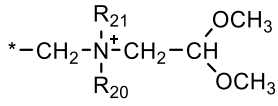
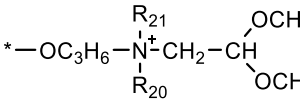
R_9, R_{10} and R_{17} independent of one other are H, CH_3, CCl_3, CF_3, Cl, Br, NR'R'' in which R' and R'' independent of each other are H or C_1-C_4 alkyl, OH, or OCH_3;

R_{11} and R_{12} independent of each other are H or a first hydrophilic group which is

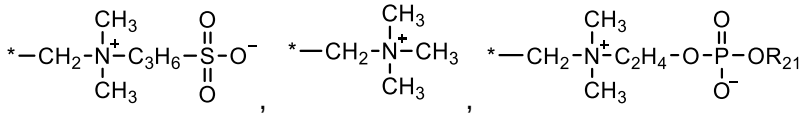
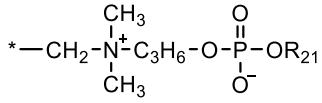
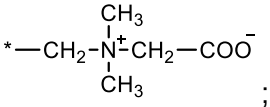
*–CH_2–$(OC_2H_4)_{n1}$–OCH_3, *–CH_2–$(OC_2H_4)_{n1}$–OH, , , or , provided that at least one of R_{11} and R_{12} is the first hydrophilic group;

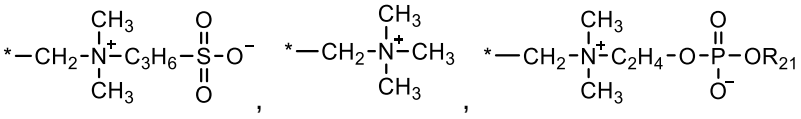
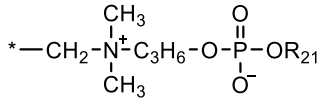
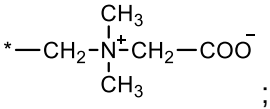
n1 is an integer of 2 to 20;

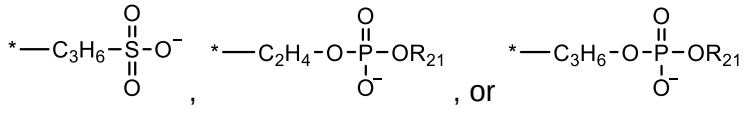
R_{13} is H, *–COOH, *–CONH-C_2H_4–$(OC_2H_4)_{n1}$–OCH_3, or *–CONH-C_2H_4–$(OC_2H_4)_{n1}$–OH;

one of R_{14} and R_{15} is H or a second hydrophilic group which is *–CH_2–$(OC_2H_4)_{n1}$–OCH_3, *–CH_2–$(OC_2H_4)_{n1}$–OH, , or  while the other of R_{14} and R_{15} is ,  or ;

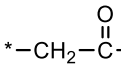
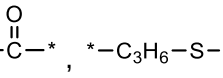
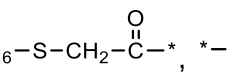
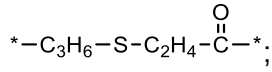
R_{16} independent of each other are H, CH_3, CCl_3, CF_3, Cl, Br, $NR_1'R_1''$ in which R_1' and R_1'' independent of each other are H or C_1-C_4 alkyl, OH, OCH_3, SO_3H, or $SO_3^-Na^+$;

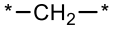
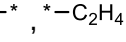
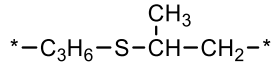
R_{18} is SO_3Na, , , or ;

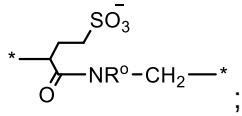
R_{19} is H, SO_3Na, , , or ;

R_{20} is CH_3, C_2H_5, ;

R_{21} is methyl or ethyl;

L1 is a linkage of , , , or ;

L2 is a linkage of , , , , , or ;

L3 is a linkage of or ;

X1 is O or NR^o.

12. The lens-forming composition of claim 1, wherein the lens-forming material comprises a silicone-containing prepolymer.
13. The lens-forming composition of claim 1, wherein the lens-forming composition is a water-based lens-forming composition.
14. The lens-forming composition of claim 13, wherein the pH of the lens-forming composition is maintained by an acetate-acetic acid buffering system.
15. A process for producing contact lenses, comprising the steps of:
obtaining a lens-forming composition of claim 1;
introducing the lens-forming composition into a mold, wherein the mold has a first mold half with a first molding surface defining the anterior surface of a contact lens and a second mold half with a second molding surface defining the posterior surface of the contact lens, wherein said first and second mold halves are configured to receive each other such that a mold cavity for receiving the lens-forming composition is formed between said first and second molding surfaces; and
irradiating, with the light, the lens-forming composition in the mold for a time period of about 15 seconds or less, so as to crosslink and/or polymerize said at least one lens-forming composition to form the contact lens.
16. The process of claim 15, wherein the mold is a reusable mold, wherein the step of irradiating is performed under a spatial limitation of radiation, wherein the mold is a reusable mold comprising a mask which is fixed, constructed or arranged in, at or on the mold half having a radiation-permeable molding surface, wherein the mask is radiation-impermeable or at least of poor radiation-permeability compared with the radiation-permeable molding surface, wherein

the mask extends inwardly right up to the mold cavity and surrounds the mold cavity so as to screen all areas behind the mask with the exception of the mold cavity.

17. A contact lens produced according to a process of claim 15.