WHAT IS CLAIMED IS:

1. A method of making an intraocular lens capable of reducing the transmittance of ultraviolet radiation at 370 nm comprising:

(a) polymerizing a mixture comprising:

at least one first monomer and

at least one second monomer comprising a trisaryl-l,3,5-triazine moiety,

(b) forming an optic portion from the copolymer

wherein the second monomer is present in an amount sufficient to reduce the transmittance of ultraviolet radiation at 370 nm to ten percent or less, and wherein the amount of the second monomer does not substantially affect a physical characteristic of the lens other than transmittance of ultraviolet radiation.

2. The method of claim 1, wherein the physical characteristic not substantially affected is refractive index.

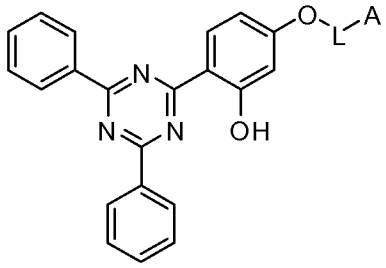
3. The method of claim 1, wherein the physical characteristic not substantially affected is water content.

4. The method of claim 1, wherein the physical characteristic not substantially affected is glass transition temperature.

5. The method of claim 1, wherein step (a) comprises at least two different first monomers.

6. The method of claim 1, wherein the first monomers of step (a) does not consist of methyl methacrylate and ethylene glycol dimethacrylate.

7. The method of claim 1, wherein the second monomer is represented by formula (I):



(I)

wherein L is a Ci to C_5 alkyl, optionally substituted by one, two, three or four hydroxy, halogen, amine, trifluoromethyl, (Ci to C_5) alkoxy, or (Ci to C_5) straight or branched alkyl optionally substituted by one, two, three or four hydroxy, halogen, amine, (Ci to C_5) alkoxy or trifluoromethyl;

A is an acrylate, methacrylate, acrylamide or methacrylamide and L is covalently bound to A by the oxygen or nitrogen atom of A.

8. The method of claim 1, wherein second monomer is present in about 0.10 to about 0.20 percent by weight of the overall dry mixture that is polymerized in step (a).

9. The method of claim 1, wherein the mixture of step (a) contains at least two first monomers wherein the resulting polymer has a water content of about 5 percent or less.

10. The method of claim 1, wherein the mixture of step (a) contains at least two first monomers wherein the resulting polymer has a water content of about 20 percent to about 30 percent.

11. A method of making an intraocular lens capable of absorbing ultraviolet radiation at 370 nm comprising:

(a) polymerizing a mixture comprising:

at least one first monomer and

at least one second monomer comprising a trisaryl-l,3,5-triazine moiety,

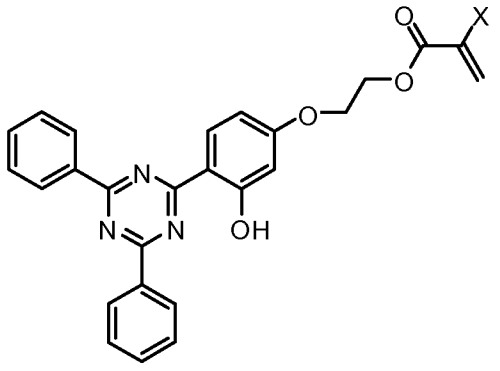
(b) forming an optic portion from the copolymer

wherein the second monomer is present in about 0.10 to about 0.20 percent by weight of the overall polymer and wherein the optic portion of the intraocular lens displays essentially the same refractive index as the optic portion of the intraocular lens formed from the polymerized mixture of (a) without the second monomer, but otherwise substantially identical conditions.

12. The method of claim 11, wherein step (a) comprises at least two first monomers.

13. The method of claim 11, wherein the first monomers of step (a) comprises an acrylate or methacrylate moiety and at least one additional moiety covalently bonded to the O of the acrylate or methacrylate moiety.

14. The method of claim 11, wherein the second monomer is represented by formula (II):



(II)

wherein X is H or CI¾.

15. The method of claim 11, wherein the optic portion of the intraocular lens displays essentially the same water content as the optic portion of the intraocular lens formed from the polymerized mixture of (a) without the second monomer, but otherwise identical conditions.

16. The method of claim 11, wherein the intraocular lens has a transmittance of ten percent or less of ultraviolet radiation at a wavelength of about 370 nm.

17. The method of claim 11, wherein the intraocular lens has a transmittance of six percent or less of ultraviolet radiation at a wavelength of about 370 nm.

18. The method of claim 11, wherein second monomer is present in about 0.13 to about 0.17 percent by weight of the overall polymer.

19. The method of claim 11, wherein the first compound does not consist of methyl methacrylate and ethylene glycol dimethacrylate.

20. The method of claim 11, wherein (b) comprises cutting, milling or both cutting and milling the intraocular lens blank into the optic portion.

21. A method for modifying an individual's eyesight, comprising inserting the intraocular lens prepared by method comprising claim 1 into an eye of a subject.

22. The method of claim 21, further comprising folding the intraocular lens prior to inserting the intraocular lens into the eye and allowing the intraocular lens to unfold after it is inserted into the eye.

23. A method for increasing the extinction coefficient of a copolymer of ultraviolet radiation at 370 nm through an intraocular lens comprising:

(a) incorporating a monomer comprising a 4-(4,6-diphenyl- 1,3,5-triazin-2-yl)-3-hydroxyphenoxy moiety into at least one polymer and

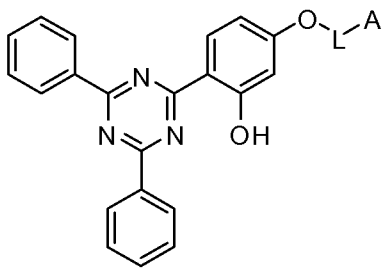
(b) forming the polymer into a material suitable for use as an intraocular lens, wherein the monomer comprising a 4-(4,6-diphenyl-l,3,5-triazin-2-yl)-3-hydroxyphenoxy moiety comprises 0.10 to 0.15 weight percent of the overall dry polymer.

24. A method for preventing the transmittance of at least 90% of ultraviolet radiation at 370 nm through a foldable intraocular lens comprising:

(a) incorporating a monomer comprising a 4-(4,6-diphenyl- 1,3,5-triazin-2-yl)-3-hydroxyphenoxy moiety into at least one polymer and

(b) forming the polymer into a material suitable for use as an intraocular lens, wherein the monomer comprising a 4-(4,6-diphenyl-l,3,5-triazin-2-yl)-3-hydroxyphenoxy moiety comprises 0.10 to 0.15 weight percent of the overall dry polymer.

25. The method of claim 24, wherein the monomer is represented by formula (I):



(I)

wherein L is a Ci to C_5 alkyl, optionally substituted by one, two, three or four hydroxy, halogen, amine, trifluoromethyl, (Ci to C5) alkoxy, or (Ci to C5) straight or branched alkyl optionally substituted by one, two, three or four hydroxy, halogen, amine, (Ci to C_5) alkoxy or trifluoromethyl;

A is an acrylate, methacrylate, acrylamide or methacrylamide and L is covalently bound to A by the oxygen or nitrogen atom of A.

26. The method of claim 24, wherein the foldable intraocular lens has a transmittance of nine percent or less of ultraviolet radiation at a wavelength of about 370 nm.

27. The method of claim 24, wherein the foldable intraocular lens has a transmittance of six percent or less of ultraviolet radiation at a wavelength of about 370 nm.

28. The method of claim 24, wherein the polymer does not consist of methyl methacrylate and ethylene glycol dimethacrylate.

29. The method of claim 24, wherein the polymer has essentially the same refractive index as a polymer without the monomer comprising a 4-(4,6-diphenyl-l,3,5-triazin-2-yl)-3-hydroxyphenoxy moiety, but otherwise identical composition.

30. The method of claim 24, wherein the polymer has essentially the same water content as a polymer without the monomer comprising a 4-(4,6-diphenyl-l,3,5-triazin-2-yl)-3-hydroxyphenoxy moiety, but otherwise identical composition.

31. A foldable intraocular lens or lens blank comprising at least one copolymer comprising at least (a) one first monomer, and

(b) a second monomer present in about 0.05 to about 0.20 percent by weight of the overall dry polymer comprising a 4-(4,6-diphenyl-l,3,5-triazin-2-yl)-3-hydroxyphenoxy moiety, wherein the foldable intraocular lens or lens blank absorbs the transmittance of at least 90% of ultraviolet radiation at 370 nm, and wherein the optic portion of the intraocular lens displays essentially the same refractive index as the optic portion of a intraocular lens formed from the polymerized mixture of (a) without the second monomer, but otherwise identical composition.

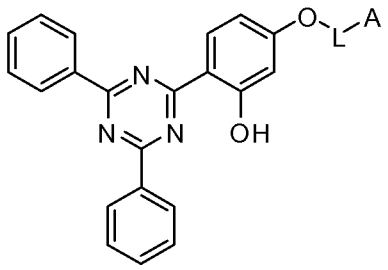
32. The lens of claim 31, wherein the second monomer is present in about 0.13 to about 0.17 percent by weight of the overall dry polymer.

33. The lens of claim 31, wherein the second monomer has an extinction coefficient of at least 3000 M^cm^{-1} for radiation at 370 nm.

34. The lens of claim 31, wherein the lens has a transmittance of nine percent or less of ultraviolet radiation at a wavelength of about 370 nm.

35. The lens of claim 31, wherein the lens has a transmittance of six percent or less of ultraviolet radiation at a wavelength of about 370 nm.

36. The lens of claim 31, wherein the second monomer is represented by formula (I):



(I)

wherein L is a Ci to C_5 alkyl, optionally substituted by one, two, three or four hydroxy, halogen, amine, trifluoromethyl, (Ci to C_5) alkoxy, or (Ci to C_5) straight or branched alkyl optionally substituted by one, two, three or four hydroxy, halogen, amine, (Ci to C_5) alkoxy or trifluoromethyl;

A is an acrylate, methacrylate, acrylamide or methacrylamide and L is covalently bound to A by the oxygen or nitrogen atom of A.

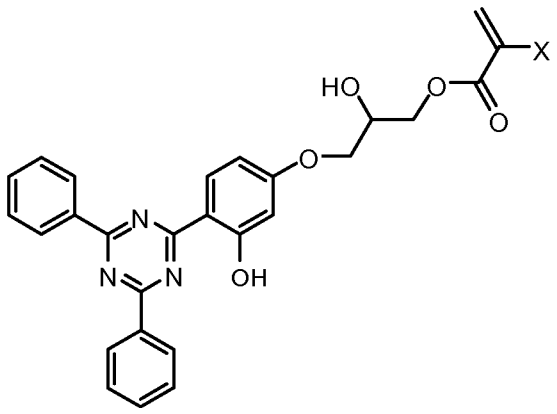
37. The method of claim 7, wherein L is a Ci to C_5 alkyl substituted by one, two, three or four hydroxyl moieties and A is an acrylate or methacrylate.

38. The method of claim 7, wherein L is a Ci to C_5 alkyl substituted by one hydroxyl moiety and A is an acrylate or methacrylate.

39. The method of claim 7, wherein L is a C_3 alkyl substituted by one hydroxyl moiety and A is an acrylate or methacrylate.

40. The method of claim 7, wherein L is represented by the formula -$CH_2CH(OH)CH_2$- and A is an acrylate or methacrylate..

41. The method of claim 11, wherein the second monomer is represented by formula (III):



(III)

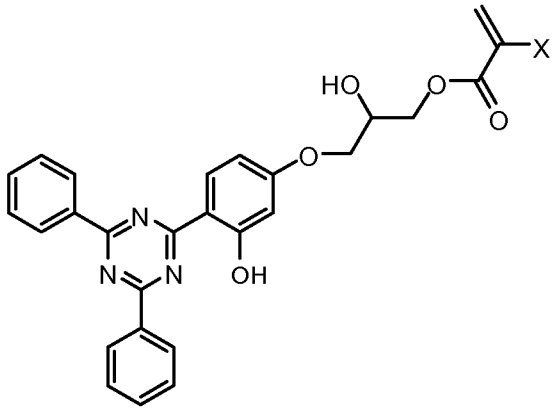
wherein X is H or CH_3.

42. The method of claim 25, wherein L is a Ci to C_5 alkyl substituted by one, two, three or four hydroxyl moieties and A is an acrylate or methacrylate.

43. The method of claim 25, wherein L is a Ci to C_5 alkyl substituted by one hydroxyl moiety and A is an acrylate or methacrylate.

44. The method of claim 25, wherein L is represented by the formula $-CH_2CH(OH)CH_2-$ and A is an acrylate or methacrylate.

45. The method of claim 25, wherein the second monomer is represented by formula (III):



(III)

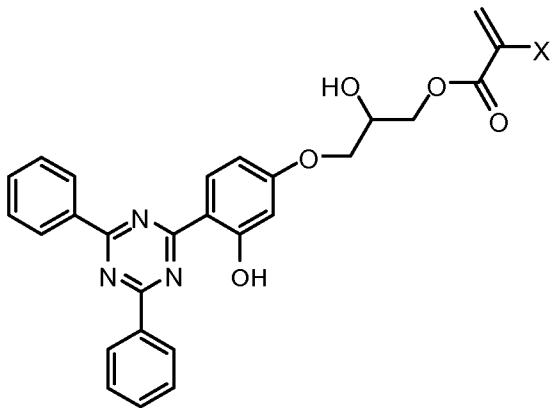
wherein X is H or CH_3.

46. The lens of claim 36, wherein L is a Ci to C_5 alkyl substituted by one, two, three or four hydroxyl moieties and A is an acrylate or methacrylate.

47. The lens of claim 36, wherein L is a Ci to C_5 alkyl substituted by one hydroxyl moiety and A is an acrylate or methacrylate.

48. The lens of claim 36, wherein L is represented by the formula $-CH_2CH(OH)CH_2-$ and A is an acrylate or methacrylate.

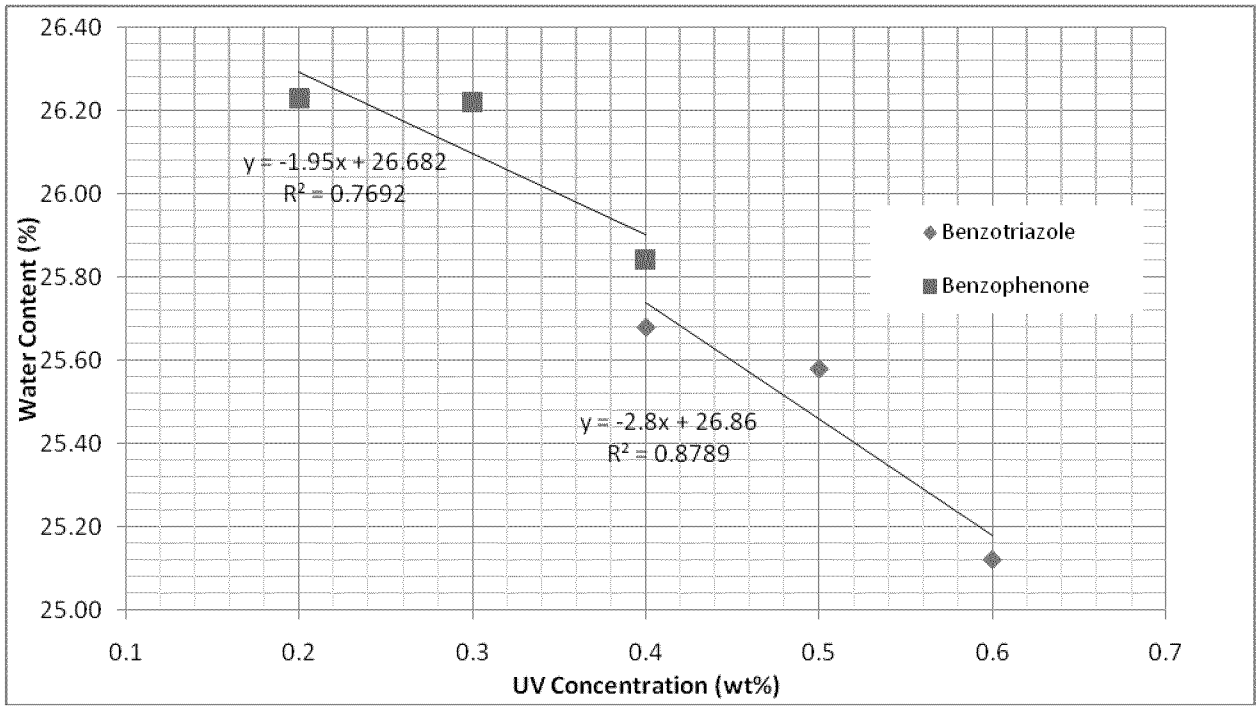
49. The lens of claim 36, wherein the second monomer is represented by formula (III):



(III)

wherein X is H or CH_3.

Figure 1.


26.40
26.20
26.00
25.80
25.60
25.40
25.20
25.00
Water Content (%)
0.1
0.2
0.3
0.4
0.5
0.6
0.7
UV Concentration (wt%)
y = -1.95x + 26.682
R² = 0.7692
y = -2.8x + 26.86
R² = 0.8789
Benzotriazole
Benzophenone