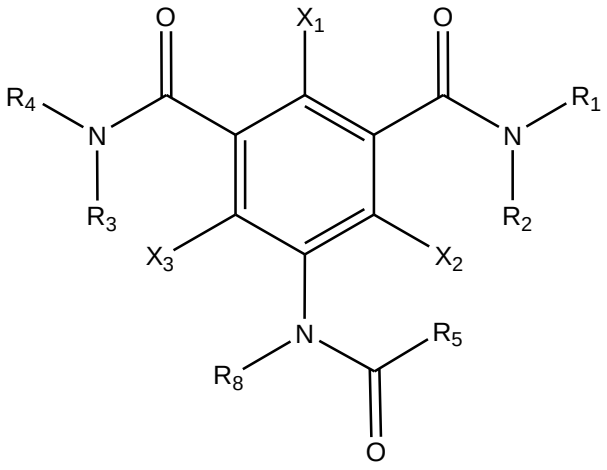
CLAIMS

1. An aqueous solution for rendering a biomaterial transparent, comprising:

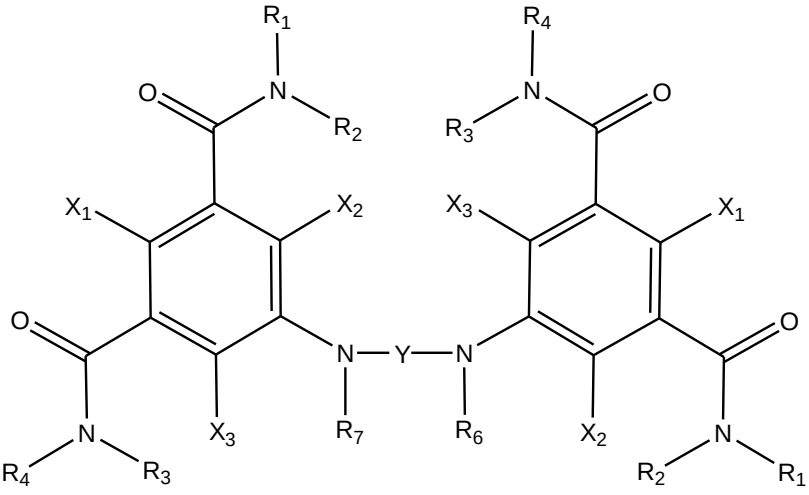
a first active compound of formula (I)



(I)

; and

a second active compound of formula (II)



(II)

;

a sufficient amount of a solvent that is water or a salt balanced buffer solution for dissolving the first or second, or a combination of the active compounds therein and thereby forming the aqueous solution;

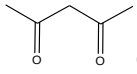
wherein:

R_1, R_2, R_3, and R_4 are independently H, or $C_{1\text{-}6}$ alkyl substituted with at least two -OH;

R_5 is $–CH_2OCH_3$ or C_{1-3} alkyl optionally substituted with at least one –OH;

R_6 and R_7 are independently acetyl or C_{1-3} alkyl;

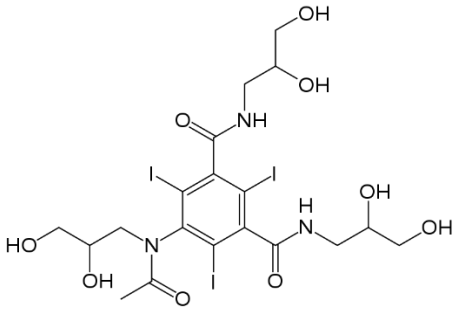
R_8 is H or C_{1-3} alkyl optionally substituted with at least two –OH;X_1, X_2, and X_3 are independently a halogen selected from the group consisting of Cl, Br, and I;

Y is  or C_{1-3} alkyl substituted with at least one –OH;

the pH of the aqueous solution is less than 11; and

the osmolarity of the aqueous solution is from 1,700 to 3,500 mOSm/L.

2. The aqueous solution of claim 1, wherein the first active compound of formula (I) is any of the followings,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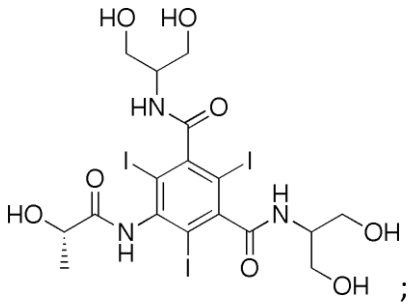
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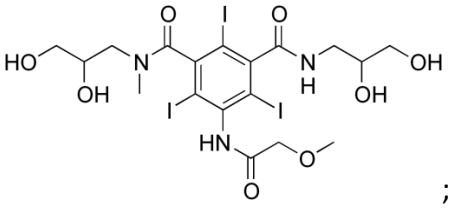
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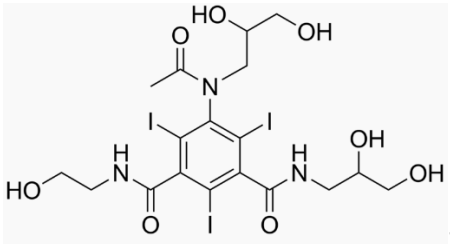
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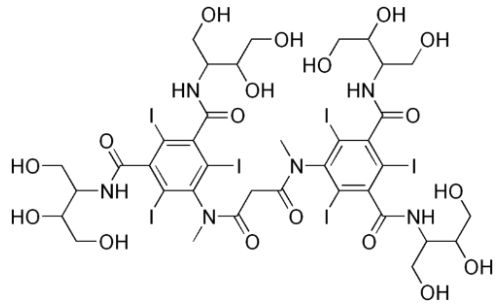
3. The aqueous solution of claim 3, wherein the first active compound of formula (I) has a concentration of at least 10% (w/v) in the aqueous solution.

4. The aqueous solution of claim 1, wherein the second active compound of formula (II) is any of the followings,



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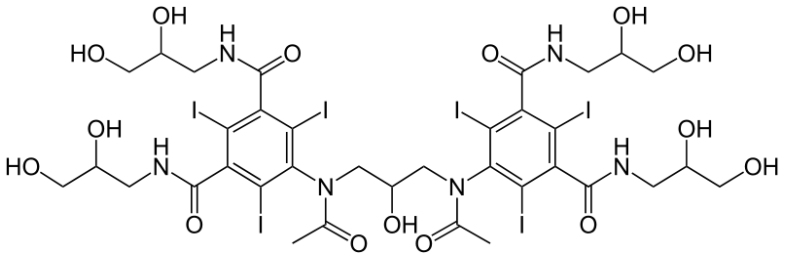

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5. The aqueous solution of claim 5, wherein the second active compound of formula (II) has a concentration of at least 10% (w/v) in the aqueous solution.

6. The aqueous solution of claim 1, further comprising an anti-freezer or a humectant, and either of which is present in the aqueous solution in an amount of 5% to 30% (w/v).

7. The aqueous solution of claim 7, wherein the anti-freezer is sugar, glycerol or dimethyl sulfoxide (DMSO).

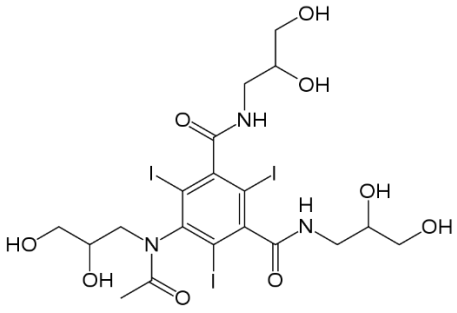
8. The aqueous solution of claim 8, wherein the anti-freezer is DMSO, provided that the biomaterial has a Keratin surface.

9. The aqueous solution of claim 7, wherein the humectant is hyaluronic acid or polyhydric alcohol.

10. A method for rendering a biomaterial transparent, comprising:

subjecting the biomaterial to the treatment of the aqueous solution of claim 1 for a sufficient period of time so as to render the biomaterial transparent.

11. The method of claim 11, wherein the first active compound of formula (I) is any of the followings,



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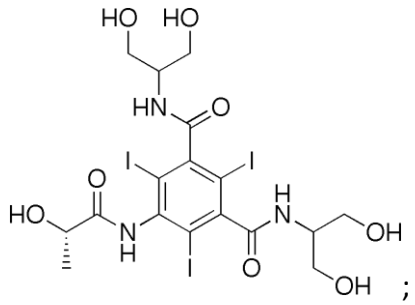

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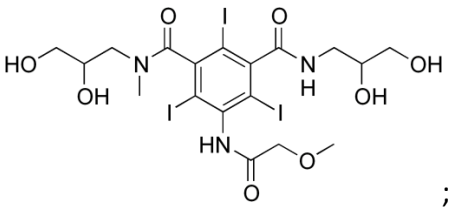

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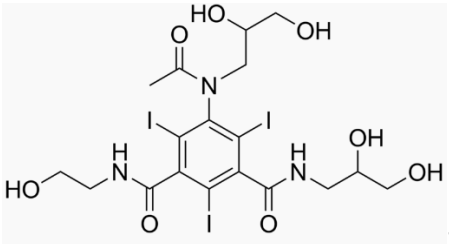

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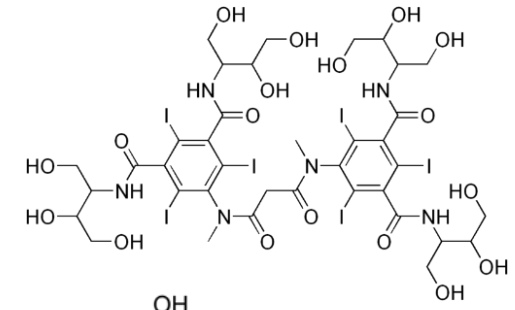
12. The method of claim 13, wherein the first active compound of formula (I) has a concentration of at least 10% (w/v) in the aqueous solution.

13. The method of claim 11, wherein the second active compound of formula (II) is any of the followings,



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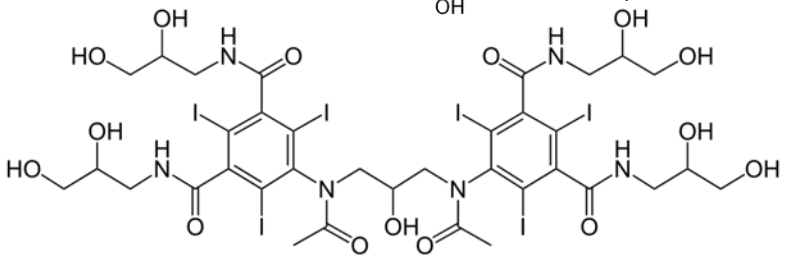

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14. The method of claim 15, wherein the second active compound of formula (II) has a concentration of at least 10% (w/v) in the aqueous solution.

15. The method of claim 11, further comprising an anti-freezer or a humectant, and either of which is present in the aqueous solution in an amount of 5% to 30% (w/v).

16. The method of claim 17, wherein the anti-freezer is sugar, glycerol or dimethyl sulfoxide (DMSO).

17. The method of claim 18, wherein the anti-freezer is DMSO, provided that the tissue has a Keratin surface.

18. The method of claim 17, wherein the humectant is hyaluronic acid or polyhydric alcohol.

19. The method of claim 11, wherein the biomaterial is a tissue derived from an insect or a mammal, or a bio-engineered collagen scaffold.

20. The method of claim 21, wherein the tissue derived from a mammal is selected from brain, heart, stomach, pancreas, intestine, liver, lung, and ear.

21. The method of claim 21, wherein the tissue is the head of an insect.

22. The method of claim 21, wherein the biomaterial is pre-labeled with an imaging tracer that is a dye, a fluorescent protein, or an antibody conjugated with a fluorescent marker.