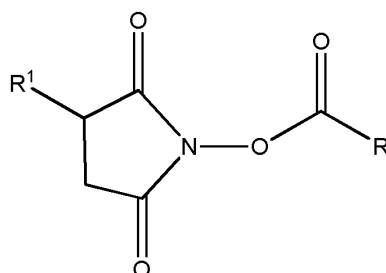


Claims

1. A method of combatting colour loss from a dyed material, the method comprising the steps of:
- (1) contacting the material with a composition comprising an electrophilic species selected from aldehydes, succinimidyl esters, and mixtures thereof;
- (2) contacting the material with a composition comprising a chelating agent and/or a salt of an amine and/or a carboxylic acid.
2. A method according to claim 1 wherein the material is a keratinous material.
3. A method according to claim 1 or claim 2 wherein the material is human hair or animal hair, preferably human hair.
4. A method according to claim 3 wherein the material is growing human hair or animal hair, preferably growing human hair.
5. A method according to any preceding claim wherein step (1) is carried out before step (2).
6. A method according to any preceding claim wherein step (2) is carried out before step (1).
7. A method according to any preceding claim wherein steps (1) and (2) are carried out simultaneously and the material is contacted with a single composition comprising: an electrophilic species selected from aldehydes, succinimidyl esters and mixtures thereof; and a chelating agent and/or a salt of an amine and a carboxylic acid.
8. A method of colouring hair, the method comprising:
- (a) contacting the hair with a colouring composition; and
- (b) contacting the hair with:
- (1) a composition comprising an electrophilic species selected from aldehydes, succinimidyl esters, and mixtures thereof; and
- (2) a composition comprising a chelating agent and/or a salt of an amine and a carboxylic acid.

9. A method according to claim 8 wherein steps (a) and (b) are carried out simultaneously and the method involves contacting the hair with a colouring composition comprising an electrophilic species selected from aldehydes, succinimidyl esters and mixtures thereof; and a chelating agent and/or a salt of an amine and a carboxylic acid.
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10. A method according to claim 8 wherein step (b) is carried out before step (a).
11. A method according to claim 8 wherein step (b) is carried out after step (a).
- 10 12. A hair care composition comprising an electrophilic species selected from aldehydes, succinimidyl esters and mixtures thereof; and a chelating agent and/or a salt of an amine and a carboxylic acid.
- 15 13. A method or composition according to any preceding claim wherein the aldehyde is a hydroxyl substituted aldehyde and/or an alpha-substituted aldehyde.
14. A method or composition according to any preceding claim wherein the aldehyde is selected from 2-hydroxypropanal, 2-hydroxyhexanal, 2-hydroxyoctanal or glyceraldehyde.
- 20 15. A method or composition according to any preceding claim comprising a first aldehyde having less than 10 carbon atoms and a second aldehyde having 10 or more carbon atoms.
- 25 16. A method or composition according to claim 15 wherein the second aldehyde is selected from 2-hydroxydecanal, 2-hydroxydodecanal and 2-hydroxytetradecanal.
- 30 17. A method or composition according to claim 15 wherein the first aldehyde is selected from 2-hydroxyhexanal, 2-hydroxyoctanal, 2-hydroxypropanal, glyceraldehyde, 2-hydroxybutanal, 3-hydroxybutanal, 4-hydroxybutanal, bromomalonaldehyde, 2-(2-hydroxyethoxy)acetaldehyde, 2-chloro octanal, 2-fluoro octanal, 2-bromo octanal, 6-hydroxyhexanal, 3-hydroxypropanal and 4-hydroxy-but-2-enal and the second aldehyde is selected from 2-hydroxydecanal, 2-hydroxydodecanal and 2-hydroxytetradecanal.
- 35 18. A method or composition according to any preceding claim wherein the succinimidyl ester is a compound of formula (IV):

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(IV)

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wherein R is optionally substituted hydrocarbyl group having at least 5 carbon atoms; and R¹ is hydrogen or a sulfonate moiety.

19. A method or composition according to claim 18 wherein R is phenyl or CH₃(CH₂)_n wherein n is 5 to 10.
20. A method or composition according to any preceding claim wherein the chelating agent is a polycarboxylic acid derived chelating agent.
21. A method or composition according to any preceding claim wherein the chelating agent is selected from DTPA, GLDA and mixtures thereof.
22. A method or composition according to any preceding claim wherein the amine salt of a carboxylic acid is an amine salt of a carboxylic acid wherein the carboxylic acid has 4 to 10 carbon atoms.
23. A method or composition according to claim 22 wherein the amine salt is the diethanolamine or triethanolamine salt of octanoic acid or hexanoic acid.
24. A composition according to any of claims 12 to 23 which is selected from a shampoo composition, a conditioning composition, a hair styling composition, a hair permanent waving composition, a hair relaxing composition, a hair permanent straightening composition or a hair colouring composition.
25. A composition according to any of claims 12 to 24 which further comprises 1 to 30 wt% surfactants, preferably anionic surfactants.

26. A composition according to any of claims 12 to 25 which further comprises a crosslinking agent comprising two or more maleic acid derived reactive moieties and a linker having two or more amino groups.
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27. A method or composition according to any preceding claim which provides a significant reduction in colour loss after 1 to 3 washes such that the colour is visibly more intense compared with hair treated by an equivalent means excluding the aldehyde and/or succinimidyl ester and the chelating agent and/or amine salt.
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28. A method or composition according to any preceding claim which provides a reduction in colour loss of at least 10% after three washes compared with hair treated by an equivalent method excluding the aldehyde and/or succinimidyl ester and the chelating agent and/or amine salt.
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29. The use of an electrophilic species selected from an electrophilic species selected from aldehydes, succinimidyl esters and mixtures thereof; and a chelating agent and/or a salt of an amine and a carboxylic acid to combat colour loss from dyed hair.
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30. A packaged hair colouring product comprising one or more compositions wherein the one or more compositions together comprise at least one dye compound and/or one dye precursor compound; an electrophilic species selected from aldehydes, succinimidyl esters and mixtures thereof; and a chelating agent and/or a salt of an amine and a carboxylic acid.
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31. A method according to claim 1 wherein the dyed material is a textile material, preferably a textile material comprising wool.
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32. A method according to claim 1 or claim 30 which combats colour loss resulting from washing a dyed textile material in a laundry washing process.