

Claims

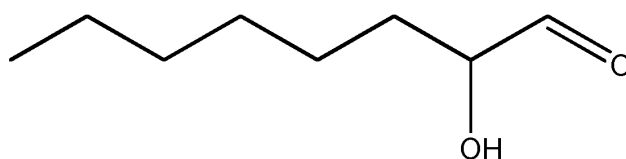
1. A method of treating a material, the method comprising contacting the material with a composition comprising an alpha-substituted aldehyde.
2. A method according to claim 1 wherein the material is a keratinous material.
3. A method according to claim 1 or claim 2 wherein the material is human hair 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 hair care composition comprising an alpha-substituted aldehyde.
6. A hair care composition according to claim 5 comprising two or more alpha substituted aldehydes.
7. A method or composition according to any preceding claim wherein the aldehyde is an α -hydroxy aldehyde.
8. A method or composition according to any preceding claim wherein the aldehyde is selected from 2-hydroxypropanal, 2-hydroxyhexanal, 2-hydroxyoctanal, bromomalonadehyde, 2-(2-hydroxyethoxy)acetaldehyde and glyceraldehyde.
9. A method or composition according to any preceding claim wherein the aldehyde is selected from 2-hydroxypropanal, 2-hydroxyhexanal, 2-hydroxyoctanal, bromomalonadehyde and 2-(2-hydroxyethoxy)acetaldehyde.
10. A method or composition according to any preceding claim comprising a first alpha-substituted aldehyde having less than 10 carbon atoms and a second alpha-substituted aldehyde having 10 or more carbon atoms.
11. A method or composition according to claim 10 wherein the second alpha-substituted aldehyde is selected from 2-hydroxydecanal, 2-hydroxydodecanal and 2-hydroxytetradecanal.

12. A method or composition according to claim 10 wherein the first alpha-substituted aldehyde is selected from 2-hydroxypropanal, 2-hydroxyhexanal, 2-hydroxyoctanal, bromomalonalddehyde and 2-(2-hydroxyethoxy)acetaldehyde and the second alpha-substituted aldehyde is selected from 2-hydroxydecanal, 2-hydroxydodecanal and 2-hydroxytetradecanal.
13. A method or composition according to any preceding claim wherein the composition comprising the aldehyde further comprises an amine salt of a carboxylic acid.
14. A method or composition according to any preceding claim wherein the composition comprising the aldehyde further comprises a polycarboxylic acid derived chelating agent.
15. A method or composition according to any preceding claim wherein the composition comprising the aldehyde further comprises a succinimidyl ester.
16. A method or composition according to any preceding claim wherein the comprising the aldehyde further comprises a crosslinking agent comprising two or more malonic acid derived reactive moieties and a linker having two or more amino groups.
17. A method or composition according to any preceding claim wherein the composition is selected from a shampoo composition, a conditioning composition, a hair dyeing/colouring composition and a hair styling composition (including a hair permanent waving composition and a hair permanent straightening/relaxing composition).
18. A method or composition according to any preceding claim wherein the composition comprising the amine salt further comprises 1 to 30 wt% of one or more surfactants, preferably one or more anionic surfactants.
19. A method or composition according to any preceding claim which provides one or more benefits selected from increased gloss or shine, improved combability, improved strength, increased softness, reduced protein loss, improved thermal durability, increased chemical resistance, increased waviness and increased straightness.
20. A method according to claim 19 wherein the benefit may be temporary, semi-permanent or permanent.

21. The use of an alpha-substituted aldehyde to enhance at least one property of hair.
22. The use according to claim 22 of two or more alpha-substituted aldehydes to enhance at least one property of hair.

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23. The compound of formula



- 10 24. 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 and an alpha-substituted aldehyde.
- 15 25. A method according to claim 1 wherein the material is a textile material, preferably a textile material comprising wool.