

WHAT IS CLAIMED IS:

1. A composition, comprising:
phenolic polymer particles, and
a surfactant, on the phenolic polymer particles.
2. A dispersion, comprising:
the composition of claim 1, and
a carrier vehicle.
3. A dispersion, comprising:
sodium lignosulfonate particles,
a surfactant, and
a carrier vehicle,
wherein the sodium lignosulfonate particles have a particle size of 0.1-1.0
microns, and
the dispersion is pourable.
4. A sunscreen composition, comprising:
the composition of claim 1, and
a UV radiation protectant.
5. A dispersion, comprising:
a silanized phenolic polymer particle, and
a carrier vehicle.
6. Lipophilic phenolic polymer particles.

7. The composition, dispersion or particles of any of the preceding claims, wherein the phenolic polymer particles comprise a substance selected from the group consisting of lignins, humates, tannins, botanical extracts containing water soluble and/or water dispersible components, and combinations thereof.

8. The composition, dispersion or particles of any of the preceding claims, wherein the phenolic polymer particles comprise a lignin selected from the group consisting of lignosulfonate, kraft lignin, sulfonated kraft lignin, oxylignin, sulfonated oxylignin, lignosulfonate copolymerized with monomers such as acrylate, acrylic acid, acrylamide, styrene sulfonate, and naphthalene sulfonate derivatives, azoligno-sulfonate, azolignin, lignosulfonate-formaldehyde condensates, lignin formaldehyde condensates, hydrophobically modified lignosulfonate, hydrophobically-modified lignin, cationically-modified lignosulfonate, cationically-modified lignin, amino lignosulfonate, amino lignin, alkylated lignosulfonate, alkylated lignin, crosslinked lignosulfonate, crosslinked lignin, and combinations thereof.

9. The composition, dispersion or particles of any of the preceding claims, wherein the phenolic polymer particles comprise a humate selected from the group consisting of sulfonated humate, humate-formaldehyde condensates, hydrophobically-modified humate, cationically-modified humate, amino humate, alkylated humate, and combinations thereof.

10. The composition, dispersion or particles of any of the preceding claims, wherein the phenolic polymer particles comprise a tannin selected from the group consisting of tannate, sulfonated tannate, tannate-formaldehyde condensates, hydrophobically modified tannate, cationically-modified tannate, and combinations thereof.

11. The composition, dispersion or particles of any of the preceding claims, wherein the phenolic polymer particles comprise a botanical extract containing water soluble and/or water dispersible components, and

the botanical extract containing water soluble and/or water dispersible components is selected from the group consisting of extracts derived from *Picea*

abies (Norway spruce or European spruce), *Larix europaea* (larch or European larch), and a mixture of the maple species *Acer saccharum*, *Acer Saccharinum* and *Acer negundo*.

12. The composition, dispersion or particles of any of the preceding claims, wherein the surfactant comprises a substance selected from the group consisting of fatty alcohols and polyols, fatty acids, polyglyceryl esters, polyglyceryl polyesters, polyesters with affinic hydroxyl, amine or amide groups, polyurethanes with affinic hydroxyl, amine or amide groups, polyamides with affinic hydroxyl, amine or amide groups, polyacrylates with affinic hydroxyl, amine or amide groups, phosphate esters, polymeric phosphoric acid salts, phospholipids, ceramides, sphingosines, combinations thereof, copolymers thereof, and cross-polymers thereof.

13. The composition, dispersion or particles of any of the preceding claims, wherein the phenolic polymer particles have a particle size of 0.001 – 10.0 microns (μm).

14. The composition, dispersion or particles of any of the preceding claims, wherein the phenolic polymer particles have a particle size of 0.01 – 5.0 microns (μm).

15. The composition, dispersion or particles of any of the preceding claims, wherein the phenolic polymer particles have a particle size of 0.1 – 1.0 microns (μm).

16. The composition, dispersion or particles of any of the preceding claims, wherein the carrier vehicle comprises a cosmetically-acceptable fluid.

17. The composition, dispersion or particles of any of the preceding claims, wherein the carrier vehicle comprises a substance selected from the group consisting of triglycerides, esters, natural oils and butters, alkanes, silicones and combinations thereof.

18. The composition, dispersion or particles of any of the preceding claims, wherein the carrier vehicle comprises a wax.
19. The composition, dispersion or particles of any of the preceding claims, wherein the phenolic polymer particles are present in an amount of 0.1-75.0% by weight, and
The surfactant is present in an amount of 1.0-100.0% of the mass of the phenolic polymer particles.
20. The composition, dispersion or particles of any of the preceding claims, wherein the phenolic polymer particles are present in an amount of 0.5-50.0% by weight, and
the surfactant is present in an amount of 10.0-60.0.0% of the mass of the phenolic polymer particles.
21. The composition, dispersion or particles of any of the preceding claims, wherein the phenolic polymer particles are present in an amount of 1.0-40.0% by weight, and
the surfactant is present in an amount of 20.0-50.0% of the mass of the phenolic polymer particles.
22. The composition, dispersion or particles of any of the preceding claims, wherein the dispersion is very water resistant.
23. The composition, dispersion or particles of any of the preceding claims, wherein the dispersion is super photostable.
24. The composition, dispersion or particles of any of the preceding claims, wherein the dispersion passes the free radical quenching test.
25. The composition, dispersion or particles of any of the preceding claims, wherein the surfactant comprises polyglyceryl-2 dipolyhydroxystearate.

26. The composition, dispersion or particles of any of the preceding claims, wherein the carrier vehicle comprises caprylic/capric triglycerides.

27. The composition, dispersion or particles of any of the preceding claims, wherein the surfactant comprises polyglyceryl-2 dipolyhydroxystearate, the carrier vehicle comprises caprylic/capric triglycerides, the sodium lignosulfonate is present in an amount of 1.0-40.0% by weight, and the polyglyceryl-2 dipolyhydroxystearate is present in an amount of 15.0-50.0% by weight.

28. The composition, dispersion or particles of any of the preceding claims, wherein the UV radiation protectant is selected from the group consisting of zinc oxide (ZnO), titanium dioxide (TiO₂), p-aminobenzoic acid (PABA), padimate O, phenylbenzimidazole sulfonic acid, cinoxate (2-ethoxyethyl p-methoxycinnamate), dioxybenzone (benzophenone-8), oxybenzone (benzophenone-3), homosalate (homomethyl salicylate), menthyl anthranilate (meradimate), octocrylene (2-cyano-3,3-diphenyl acrylic acid), octyl methoxycinnamate (octinoxate), octyl salicylate (2-ethylhexyl salicylate), sulisobenzene (2-hydroxy-4-methoxybenzophenone-5-sulfonic acid, 3-benzoyl-4-hydroxy-6-methoxybenzenesulfonic acid, benzophenone-4), trolamine salicylate (triethanolamine salicylate), avobenzene (1-(4-methoxyphenyl)-3-(4-tert-butylphenyl)propane-1,3-dione), ecamsule (terephthalylidene dicamphor sulfonic acid), cerium oxide (CeO₂), drometrizole trisiloxane, bis-ethylhexyloxyphenol methoxyphenyl triazine, bisoctrizole and combinations thereof.

29. The composition, dispersion or particles of any of the preceding claims, wherein the UV radiation protectant is selected from the group consisting of zinc oxide (ZnO), titanium dioxide (TiO₂) and combinations thereof.

30. A method of making the dispersion of any of the preceding claims, comprising:

combining the phenolic polymer particles, the surfactant, and the carrier vehicle in a vessel to form the dispersion;

stirring the dispersion until it is homogenous; and
optionally, milling the dispersion.

31. A method of treating or preventing oxidative damage to skin, comprising:
applying the composition, dispersion or particles of any of the preceding
claims to the skin.
32. A method of protecting keratinous material, comprising:
applying the composition, dispersion or particles of any of the preceding
claims to the keratinous material,
wherein the keratinous material is selected from the group consisting of hair,
fingernails, toenails, and the outer layer of skin.
33. A method of protecting human skin, comprising:
applying the composition, dispersion or particles of any of the preceding
claims to the human skin.
34. A method of suppressing lipid peroxidation in the skin, comprising:
applying the composition, dispersion or particles of any of the preceding
claims to the skin.
35. A method of preventing or reducing the appearance of lines and wrinkles in
skin, comprising:
applying the composition, dispersion or particles of any of the preceding
claims to the skin.
36. A method of preventing loss of elasticity of skin, comprising:
applying the composition, dispersion or particles of any of the preceding
claims to the skin.
37. A method of preventing thinning of skin, comprising:
applying the composition, dispersion or particles of any of the preceding
claims to the skin.

38. A method of preventing pigment darkening of skin, comprising:
applying the composition, dispersion or particles of any of the preceding claims to the skin.
39. A method of attenuating HEV radiation exposure to skin, comprising:
applying the composition, dispersion or particles of any of the preceding claims to the skin.
40. A method of quenching free radicals in keratinous material, comprising:
applying the composition, dispersion or particles of any of the preceding claims to the keratinous material,
wherein the keratinous material comprises hair or skin.
41. A method of making the dispersion of any of the preceding claims, comprising:
reacting a phenolic polymer particle with a silanizing agent to form the silanized phenolic polymer particle;
combining the silanized phenolic polymer particle and the carrier vehicle in a vessel to form the dispersion;
stirring the dispersion until it is homogenous; and
optionally, milling the dispersion.
42. A method of making the lipophilic phenolic polymer particles of any of the preceding claims, comprising:
milling a phenolic polymer to form phenolic polymer particles; and
spraying the phenolic polymer particles with a surfactant or a silanizing agent in a vessel under agitation, optionally with heating, to form the lipophilic phenolic polymer particles.