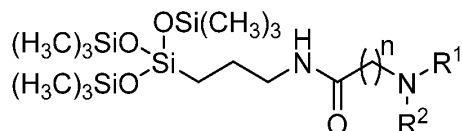


CLAIMS

1. A formulation for a shampoo, comprising:
at least one surfactant of Formula I,



Formula I

wherein R¹ and R² may be the same or different, and comprise at least one group selected from the group consisting of C₁-C₆ alkyl, optionally the C₁-C₆ alkyl may include one or more of oxygen, nitrogen, or sulfur atoms or groups that include at least one of these atoms, and the alkyl chain may be optionally substituted with one or more substituents selected from the group consisting of hydroxyl, amino, amido, sulfonyl, sulfonate, carbonyl, carboxyl, and carboxylate;

n is an integer from 1 to 12;

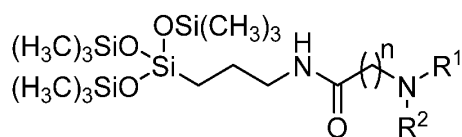
the terminal nitrogen is optionally further substituted with R³, wherein R³ is selected from the group consisting of hydrogen, oxygen, hydroxyl, and C₁-C₆ alkyl;

an optional counterion associated with the compound which, if present, is selected from the group consisting of chloride, bromide, and iodide;

at least one of a foaming agent and a thickener; and

water.

2. The formulation of Claim 1, further comprising a foam booster.
3. The formulation of Claim 1, further comprising a pH stabilizer.
4. The formulation of Claim 1, further comprising a soil penetration agent.
5. The formulation of Claim 1, further comprising a fragrance.
6. A formulation for a hair conditioner, comprising:
at least one surfactant of Formula I,



Formula I

wherein R¹ and R² may be the same or different, and comprise at least one group selected from the group consisting of C₁-C₆ alkyl, optionally the C₁-C₆ alkyl may include one or more of oxygen, nitrogen, or sulfur atoms or groups that include at least one of these atoms, and the alkyl chain may be optionally substituted with one or more substituents selected from the group consisting of hydroxyl, amino, amido, sulfonyl, sulfonate, carbonyl, carboxyl, and carboxylate;

n is an integer from 1 to 12;

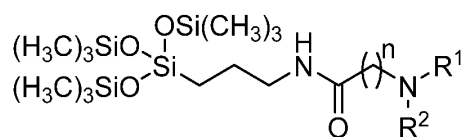
the terminal nitrogen is optionally further substituted with R³, wherein R³ is selected from the group consisting of hydrogen, oxygen, hydroxyl, and C₁-C₆ alkyl;

an optional counterion associated with the compound which, if present, is selected from the group consisting of chloride, bromide, and iodide;

a fatty component; and

water.

7. The formulation of Claim 6, further comprising an emulsifier.
8. The formulation of Claim 6, further comprising at least one thickening agent.
9. The formulation of Claim 6, further comprising a foaming agent.
10. The formulation of Claim 6, further comprising at least one clay.
11. The formulation of Claim 6, further comprising a fragrance.
12. A formulation for a cleanser, comprising:
at least one surfactant of Formula I,



Formula I

wherein R¹ and R² may be the same or different, and comprise at least one group selected from the group consisting of C₁-C₆ alkyl, optionally the C₁-C₆ alkyl may include one or more of oxygen, nitrogen, or sulfur atoms or groups that include at least one of these atoms, and the alkyl chain may be optionally substituted with one or more substituents selected from the group consisting of hydroxyl, amino, amido, sulfonyl, sulfonate, carbonyl, carboxyl, and carboxylate;

n is an integer from 1 to 12;

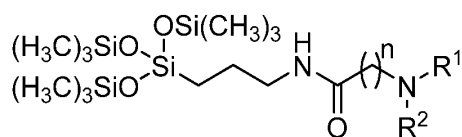
the terminal nitrogen is optionally further substituted with R³, wherein R³ is selected from the group consisting of hydrogen, oxygen, hydroxyl, and C₁-C₆ alkyl;

an optional counterion associated with the compound which, if present, is selected from the group consisting of chloride, bromide, and iodide;

at least one of a solvent and a humectant; and

water.

13. The formulation of Claim 12, further comprising at least one water-soluble polymer.
14. The formulation of Claim 12, further comprising at least one fatty component.
15. The formulation of Claim 12, further comprising at least one conditioner.
16. The formulation of Claim 12, further comprising a hydrophobicity modifier.
17. A formulation for a toothpaste, comprising:
at least one surfactant of Formula I,



Formula I

wherein R¹ and R² may be the same or different, and comprise at least one group selected from the group consisting of C₁-C₆ alkyl, optionally the C₁-C₆ alkyl may include one or more of oxygen, nitrogen, or sulfur atoms or groups that include at least one of these atoms, and the alkyl chain may be optionally substituted with one or more substituents selected from the group consisting of hydroxyl, amino, amido, sulfonyl, sulfonate, carbonyl, carboxyl, and carboxylate;

n is an integer from 1 to 12;

the terminal nitrogen is optionally further substituted with R³, wherein R³ is selected from the group consisting of hydrogen, oxygen, hydroxyl, and C₁-C₆ alkyl;

an optional counterion associated with the compound which, if present, is selected from the group consisting of chloride, bromide, and iodide;

a fluoride ion source; and

water.

18. The formulation of Claim 17, further comprising at least one basic amino acid.

19. The formulation of Claim 17, further comprising calcium carbonate.

20. The formulation of Claim 17, further comprising a flavoring agent.