

Alimi, et al., Compositions, Kits, Methods and Uses for Cleaning, Disinfecting, Sterilizing and/or Treating

CLAIMS

1. A composition comprising, consisting essentially of, or consisting of hypochlorous acid or free available chlorine and one or more metal salts.
2. A composition comprising, consisting essentially of, or consisting of hypochlorous acid or free available chlorine and one or more quaternary compounds or silicon quaternary compounds.
3. A composition comprising, consisting essentially of, or consisting of hypochlorous acid or free available chlorine and one or more guanide-containing compounds.
4. The composition according to claim 2 or 3 further comprising, consisting essentially of, or consisting of one or more metallic particles.
5. The composition according to any one of claims 2-4 further comprising, consisting essentially of, or consisting of one or more metal salts.
6. A composition comprising, consisting essentially of, or consisting of one or more alcohols and one or more quaternary compounds or silicon quaternary compounds.
7. A composition comprising, consisting essentially of, or consisting of one or more alcohols and one or more guanide-containing compounds.
8. The composition according to claim 6 or 7 further comprising, consisting essentially of, or consisting of one or more metallic particles.
9. The composition according to any one of claims 6-8 further comprising, consisting essentially of, or consisting of one or more metal salts.
10. A composition comprising, consisting essentially of, or consisting of hypochlorous acid or free available chlorine and one or more metallic particles.
11. A composition comprising, consisting essentially of, or consisting of hypochlorous acid or free available chlorine, one or more metallic particles and one or more metal salts.
12. The composition according to any one of claims 1, 5, 9 or 11, wherein the one or more metal salts include copper chloride, iron chloride, titanium chloride, zinc chloride, silver nitrate, or any combination thereof.
13. The composition according to claim 2 or 6, wherein the one or more quaternary compounds include one or more dialkyl quaternary compounds and/or one or more polyether fatty quaternary compounds

Alimi, et al., Compositions, Kits, Methods and Uses for Cleaning, Disinfecting, Sterilizing and/or Treating or wherein the one or more silicon quaternary compounds include one or more silicone dialkyl quaternary compounds and/or one or more silicone polyether fatty quaternary compounds.

14. The composition according to claim 13, wherein the one or more silicone dialkyl quaternary compounds include dimethyloctadecyl[3-(trimethoxysilyl)propyl]ammonium chloride and didodecyldimethylammonium chloride, di-n-alkyldimethyl ammonium chloride, and tetradecyldimethyl-(3-trimethoxysilyl)propyl ammonium chloride and/or wherein the one or more silicone dialkyl quaternary compounds include dimethyloctadecyl[3-(trimethoxysilyl)propyl]ammonium chloride and tetradecyldimethyl-(3-trimethoxysilyl)propyl ammonium chloride.
15. The composition according to claim 3 or 7, wherein the one or more guanide-containing compounds comprise, consist essentially of, or consist of a biguanide, a biguanide-containing compound, a biguanidine, a biguanidine-containing compound, a triguanide, a triguanide-containing compound, or any combination thereof.
16. The composition according to claim 15, wherein the one or more biguanide-containing compounds include a polyhexamethylene biguanide (PHMB), a polyaminopropyl biguanide (PAPB), a 1,1'-(1,6-Hexanediyl)bis{2-[N'-(2-ethylhexyl)carbamimidoyl]guanidine} (alexidine), a chlorhexidine, a chlorhexidine gluconate, or any combination thereof.
17. The composition according to claim 6 or 7, wherein the one or more alcohols include methanol, ethanol, propanol, isopropanol, butanol, pentanol, and/or 1-hexadecanol.
18. The composition according to any one of claims 4, 8, 10 or 11, wherein the one or more metallic particles include a metal acetate particle, a metal chloride particle, a metal nitrate particle, or a metal oxide particle, or any combination thereof.
19. The composition according to any one of claims 1-18, further comprising, consisting essentially of, or consisting of one or more carriers.
20. The composition according to any one of claims 1-19, further comprising, consisting essentially of, or consisting of one or more additional ingredients.
21. The composition according to claim 42, wherein the one or more additional ingredient includes a preservative, a chelating agent, or any combination thereof.
22. A kit comprising, consisting essentially of, or consisting of a composition as defined in any one of claims 1-21.
23. The kit according to Claim 22, further comprising, consisting essentially of, or consisting of one or more delivery or application systems, and/or instructions, and/or a container.

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24. A kit comprising, consisting essentially of, or consisting of a first component including hypochlorous acid or free available chlorine and a second component including one or more quaternary compounds or silicon quaternary compounds.
25. A kit comprising, consisting essentially of, or consisting of a first component including hypochlorous acid or free available chlorine and a second component including one or more guanide-containing compounds.
26. A kit comprising, consisting essentially of, or consisting of a first component including one or more alcohols and a second component including one or more quaternary compounds or silicon quaternary compounds.
27. A kit comprising, consisting essentially of, or consisting of a first component including one or more alcohols and a second component including one or more guanide-containing compounds.
28. A kit comprising, consisting essentially of, or consisting of a first component including hypochlorous acid or free available chlorine and a second component including one or more metallic particles.
29. A kit comprising, consisting essentially of, or consisting of a first component including hypochlorous acid or free available chlorine and a second component including one or more metal salts.
30. A kit comprising, consisting essentially of, or consisting of a first component including hypochlorous acid or free available chlorine, a second component including one or more metallic particles and a third component including one or more metal salts.
31. The kit according to any one of Claims 24-30, further comprising, consisting essentially of, or consisting of a third component including one or more metallic particles and/or a fourth component including one or more metal salts, and/or a fifth component including one or more cationic surfactants, and/or a sixth component including a rinse solution and/or one or more delivery or application systems, and/or instructions, and/or a container
32. A method to clean, disinfect and/or sterilize a device, the method comprising, consisting essentially of, or consisting of applying a composition as defined in any one of Claims 1-21 or applying the components of a kit as defined in any one of Claims 22-31, to a device, wherein application of the composition cleans, disinfects and/or sterilizes the device.
33. A composition as defined in any one of Claims 1-21 or applying the components of a kit as defined in any one of Claims 22-31 for use in cleaning, disinfecting and/or sterilizing a device.

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34. Use of a composition as defined in any one of Claims 1-21 or applying the components of a kit as defined in any one of Claims 22-31 to clean, disinfect and/or sterilize a device.
35. A method to clean, disinfect and/or sterilize a surface area, the method comprising, consisting essentially of, or consisting of applying a composition as defined in any one of Claims 1-21 or applying the components of a kit as defined in any one of Claims 22-31, to a device, wherein application of the composition cleans, disinfects and/or sterilizes the device.
36. A composition as defined in any one of Claims 1-21 or applying the components of a kit as defined in any one of Claims 22-31 for use in cleaning, disinfecting and/or sterilizing a surface area.
37. Use of a composition as defined in any one of Claims 1-21 or applying the components of a kit as defined in any one of Claims 22-31 to clean, disinfect and/or sterilize a surface area.
38. The method of Claim 35, or the use of Claim 36 or 37, wherein the surface area is a porous surface area or a non-porous surface area.
39. The method of Claim 35 or 38, or the use of any one of Claims 36-38, wherein the surface area comprises a table top, counter top, floor, wall, ceiling, window, door, door handle, shower, bath, sink, faucet, toilet, toilet seat, drain, equipment, machinery, personal protective gear, personal biohazard gear, a medical device, dental device, pharmaceutical device, veterinary device, mortuary device or human skin.
40. A method to clean, disinfect and/or sterilize a microbial infection in an individual, the method comprising, consisting essentially of, or consisting of applying a composition as defined in any one of Claims 1-21 or applying the components of a kit as defined in any one of Claims 22-31 to the individual, wherein application of the composition cleans, disinfects and/or sterilizes the individual.
41. A composition as defined in any one of Claims 1-21 or applying the components of a kit as defined in any one of Claims 22-31 for use in cleaning, disinfecting and/or sterilizing a microbial infection in an individual.
42. Use of a composition as defined in any one of Claims 1-21 or applying the components of a kit as defined in any one of Claims 22-31 to clean, disinfect and/or sterilize a microbial infection in an individual.
43. The method of Claim 40, or the use of Claim 41 or 42, wherein application of the composition is applied topically or administered enterally or parenterally.
44. The method of any one of Claims 35, 38-40 or 43, or the use of any one of Claims 36-39 or 41-43, wherein the composition is applied daily, every other day, every third of day, once a week, multiple

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45. The method of any one of Claims 35, 38-40, 43 or 44, or the use of any one of Claims 36-39 or 41-44, wherein the composition is applied multiple times per day.
46. A method to treat an individual, the method comprising, consisting essentially of, or consisting of applying a composition as defined in any one of Claims 1-21 or applying the components of a kit as defined in any one of Claims 22-31 to the individual, wherein application of the composition treats the individual.
47. A composition as defined in any one of Claims 1-21 or applying the components of a kit as defined in any one of Claims 22-31 for use in treating a condition an individual.
48. Use of a composition as defined in any one of Claims 1-21 or applying the components of a kit as defined in any one of Claims 22-31 in treating a condition an individual.
49. The method of Claim 46, or the use of Claim 47 or 48, wherein application of the composition is applied topically or administered enterally or parenterally.
50. The method of any one of Claims 46 or 49, or the use of any one of Claims 47-49, wherein the composition is applied daily, every other day, every third of day, once a week, multiple times per week, once a month, multiple times per month, once a year or multiple times per year, as desired.
51. The method of any one of Claims 46, 49 or 50, or the use of any one of Claims 47-50, wherein the composition is applied multiple times per day.
52. The method of any one of Claims 46 or 49-51, or the use of any one of Claims 47-51, wherein the condition is a wound, an ophthalmic condition, a dermatological condition, an inflammation, an ache or a pain.