CLAIMS

1. A composition comprising hypochlorous acid or free available chlorine, the amount of hypochlorous acid or free available chlorine being in an amount that restrains, prohibits, or otherwise prevents microbial population growth.

2. The composition according to Claim 1, wherein the hypochlorous acid or free available chlorine is in an amount that does not eradicate the microbial population to a degree that achieves disinfection or sterilization.

3. The composition according to Claim 1 or 2, wherein the hypochlorous acid or free available chlorine is in an amount of about 0.01 ppm to about 5 ppm.

4. The composition according to any one of Claims 1-3, wherein the hypochlorous acid or free available chlorine is in an amount of about 0.025 ppm to about 2 ppm.

5. The composition according to any one of Claims 1-4, wherein the hypochlorous acid or free available chlorine is in an amount of about 0.05 ppm to about 0.5 ppm.

6. The composition of any one of Claims 1-5, wherein the hypochlorous acid or free available chlorine is in an amount of about 0.1 ppm to about 0.4 ppm.

7. The composition according to any one of Claims 1-6, wherein the hypochlorous acid or free available chlorine is in an amount of less than 0.5 ppm.

8. The composition according to any one of Claims 1-7, further comprising one or more metallic particles and/or one or more metal salts.

9. The composition according to Claim 8, wherein the one or more metal salts include a metal chloride, a metal oxide, or any combination thereof.

10. The composition according to Claim 9, wherein the one or more metal salts comprise calcium, copper, zinc or any mixture thereof.

11. The composition according to Claim 9, wherein the metal chloride includes copper chloride and zinc chloride.

12. The composition according to Claim 9, wherein the metal oxide includes calcium oxide.

13. The composition according to any one of Claims 1-12, further comprising a phosphate buffer.

14. The composition according to Claim 13, wherein the phosphate buffer is a calcium phosphate or sodium phosphate.

15. A method of making a microbiostatic water or other liquid, the method comprising applying a composition as defined in any one of Claims 1-14 to water or other liquid, manufactured as sterile or non-sterile, in a microbiostatic effective amount.

16. A method of making a microbiostatic water or other liquid, the method comprising applying a composition as defined in any one of Claims 1-14 to water or other liquid in an amount that restrains, prohibits, or otherwise prevents microbial population growth.

17. A method of making a microbiostatic water or other liquid, the method comprising applying a composition as defined in any one of Claims 1-14 to water or other liquid in an amount that restrains, prohibits, or otherwise prevents microbial population growth without eradicating the microbial population to a degree that achieves disinfection or sterilization.

18. A method of reducing or inhibiting microbial growth in water or other liquid, the method comprising applying a composition as defined in any one of Claims 1-14 to water or other liquid in a microbiostatic effective amount, wherein application of the composition application of the composition reduces or inhibits microbial population growth.

19. A method of reducing or inhibiting microbial growth in water or other liquid, the method comprising applying a composition as defined in any one of Claims 1-14 to water or other liquid in an amount that restrains, prohibits, or otherwise prevents microbial population growth, wherein application of the composition application of the composition reduces or inhibits microbial population growth.

20. A method of reducing or inhibiting microbial growth in water or other liquid, the method comprising applying a composition as defined in any one of Claims 1-14 to water or other liquid in an amount that restrains, prohibits, or otherwise prevents microbial population growth without eradicating the microbial population to a degree that achieves disinfection or sterilization, wherein application of the composition application of the composition reduces or inhibits microbial population growth.

21. A method of reducing or inhibiting microbial growth in a device, the method comprising applying a composition comprising as defined in any one of Claims 1-14 to water or other liquid present in the device in a microbiostatic effective amount, wherein application of the composition reduces or inhibits microbial population growth during use or storage of the device.

22. A method of reducing or inhibiting microbial growth in a device, the method comprising applying a composition as defined in any one of Claims 1-14 to water or other liquid present in the device in an amount that restrains, prohibits, or otherwise prevents microbial population growth, wherein application of the composition reduces or inhibits microbial population growth during use or storage of the device.

23. A method of reducing or inhibiting microbial growth in a device, the method comprising applying a composition as defined in any one of Claims 1-14 to water or other liquid present in the device in an amount that restrains, prohibits, or otherwise prevents microbial population growth without eradicating the microbial population to a degree that achieves disinfection or sterilization, wherein application of the composition reduces or inhibits microbial population growth during use or storage of the device.

24. A method according to any one of Claims 21-23, wherein the device is a medical device, a residential device, a commercial device or an industrial device.

25. A method to wash or irrigate a surface area, the method comprising applying a composition as defined in any one of Claims 1-14 to the surface area, wherein application of the composition washes or irrigates the surface area.