Claims

1. A microbiostatic composition comprising a microbiostatic agent comprising at least 0.01 ppm to at most 0.8 ppm hypochlorous acid or at least 0.01 ppm to at most 0.8 ppm free available chlorine, the composition having a microbiostatic activity that reversably restrains growth of a microbial population within the first seven days of continuous exposure to the microbiostatic composition,

   wherein the microbiostatic composition has an effective-use stability of at least 1 week; and

   wherein growth of the microbial population restrained by of continuous exposure to the microbiostatic composition resumes upon removal of the microbiostatic composition; and

   wherein the microbiostatic composition lacks microbiocidal activity and does not include a metallic particle, a metal salt, ozone, or hydrogen peroxide.

2. The microbiostatic composition according to Claim 1, wherein the hypochlorous acid or free available chlorine is in an amount of at least 0.1 ppm to at most 0.7 ppm.

3. The composition according to Claim 1 or 2, wherein the hypochlorous acid or free available chlorine is in an amount of at least 0.1 ppm to at most 0.6 ppm.

4. The microbiostatic composition according to any one of Claims 1-3, wherein the hypochlorous acid or free available chlorine is in an amount of at least 0.1 ppm to at most 0.6 ppm.

5. The microbiostatic composition according to any one of Claims 1-4, wherein the hypochlorous acid or free available chlorine is in an amount of at least 0.1 ppm to at most 0.5 ppm.

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

7. The microbiostatic composition according to any one of Claims 1-6, wherein the hypochlorous acid or free available chlorine is in an amount of at least 0.1 ppm to at most 0.3 ppm.

8. The microbiostatic composition according to any one of Claims 1-7, wherein the hypochlorous acid or free available chlorine is in an amount of at least 0.1 ppm to at most 0.25 ppm.

9. The microbiostatic composition according to any one of Claims 1-8, wherein the amount restrains bacterial population growth for at least 14 days, at least 21 days, or at least 28 days.

10. The microbiostatic composition according to any one of Claims 1-9, having an effective-use stability of 1 hour to 24 hours.

11. The microbiostatic composition according to any one of Claims 1-9, having an effective-use stability of 1 day to 30 days.

12. The microbiostatic composition according to any one of Claims 1-11, having a shelf-life stability of 3 months to 24 months.

13. The microbiostatic composition according to Claims 1-12, having an effective-use stability of at least 2 week.

14. The microbiostatic composition according to Claims 1-13, having at most 25% degradation of the hypochlorous acid or free available chlorine.

15. A method of making a microbiostatic water or other liquid, the method comprising applying a microbiostatic 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. The method according to Claim 15, wherein the microbiostatic composition is in an amount that restrains, prohibits, or otherwise prevents microbial population for at least 7 days.

17. The method according to Claim 15 or 16, wherein the microbiostatic composition is in an amount that restrains, prohibits, or otherwise prevents microbial population growth for at least 7 days 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 microbiostatic composition as defined in any one of Claims 1-14 to water or other liquid in a microbiostatic effective amount, wherein application of the microbiostatic composition reduces or inhibits microbial population growth for at least 7 days.

19. The method according to Claim 18, wherein the microbiostatic composition is in an amount that restrains, prohibits, or otherwise prevents microbial population growth for at least 14 days.

20. The method according to Claim 18 or 19, wherein the microbiostatic composition is in an amount that restrains, prohibits, or otherwise prevents microbial population growth for at least 14 days without eradicating the microbial population to a degree that achieves disinfection or sterilization.

21. A method of reducing or inhibiting microbial growth in a device, the method comprising applying a microbiostatic 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 microbiostatic composition reduces or inhibits microbial population growth during use or storage of the device for at least 7 days.

22. The method according to Claim 21, wherein the microbiostatic composition is in an amount that restrains, prohibits, or otherwise prevents microbial population growth for at least 14 days for.

23. The method according to Claim 21, wherein the microbiostatic composition is in an amount that restrains, prohibits, or otherwise prevents microbial population growth for at least 14 days without eradicating the microbial population to a degree that achieves disinfection or sterilization.

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 microbiostatic composition as defined in any one of Claims 1-14 to the surface area, wherein application of the microbiostatic composition washes or irrigates the surface area.