WHAT IS CLAIMED IS:

1. A dual-action antimicrobial formulation for both immediate and persistent reduction of broad spectrum microbes, ~~said~~ the formulation comprising:

a quaternary ammonium salt in an amount ranging from 0.10% to 0.40% by weight of the formulation;

~~a terpene or derivative thereof~~farnesol in an amount ranging from 0.25% to 0.60% by weight of the formulation;

panthenol in an amount ranging from 0.25% to 0.60% by weight of the formulation;

tocopheryl acetate in an amount ranging from 0.05% to 0.5% by weight of the formulation;

chlorhexidine gluconate in an amount ranging from 0.10% to 0.40 % by weight of the formulation;

polyaminopropyl biguanide in an amount ranging from 0.01% to 3.0% by weight of the formulation;

a second quaternium ammonium compound in an amount ranging from 0.05% to 1.0% by weight of the formulation; and

alcohol in an amount ranging from 8% to 20% by weight of the formulation;

wherein the formulation is a lotion;

wherein the formulation kills at least 99% of a plurality of microbes within 20 seconds of contact with the microbes,

wherein the formulation is configured to kill at least 90% of ~~said~~ the plurality of microbes at least 4 hours post-application of ~~said~~ the formulation, and

wherein ~~said~~ the plurality of microbes comprises one or more of the following: fungi, mold, yeast, bacteria, and viruses.

2. The formulation of Claim 1, ~~wherein the plurality of microbes comprises bacteria,~~ wherein the bacteria comprises gram-positive and gram-negative bacteria and wherein the formulation kills at least 99% of both gram-positive and gram-negative bacteria within 20 seconds of contact with the microbes, and wherein the formulation is configured to kill at least 90% of ~~said~~ the gram-positive and gram-negative bacteria at least 4 hours post-application of ~~said~~ the formulation.

3. A formulation according to Claim 1 or 2, ~~wherein the plurality of microbes comprises bacteria and~~ wherein ~~said~~ the formulation is suitable for application to a surface that is infected with gram-positive and gram-negative bacteria and/or a plurality of microbes.

4. The formulation of Claim 1, wherein ~~said~~ the formulation is suitable for application to a surface that is infected with bacteria and/or viruses.

5. A formulation according to Claim 3 or 4, wherein the infected surface is human or animal skin or an inorganic surface.

~~6. A formulation according to any one of Claims 1 to 5, wherein the formulation further comprises tocopheral acetate, wherein the tocopherol acetate is present in the formulation in an amount ranging from 0.05% to 0.5% by weight of the formulation.~~

~~7.~~6.A formulation according to any one of Claims 1 to ~~6~~5, wherein the polyaminopropyl biguanide is present in an amount of ~~about~~ 1.5% by weight of the formulation.

~~8.~~7.A formulation according to any one of Claims 1 to ~~7~~6, wherein the quaternary ammonium salt is selected from the group consisting of benzethonium chloride, benzalkonium chloride, and combinations thereof.

~~9.~~8.A formulation according to any one of Claims 1 to ~~8~~7, wherein the quaternary ammonium salt comprises benzethonium chloride.

~~10.~~9. A formulation according to any one of Claims 1 to ~~9~~8, ~~wherein the formulation~~ further comprises one or more zinc salts in an amount ranging from 0.05% to 0.60% by weight of the formulation.

~~11.~~10. The formulation of Claim ~~10~~9, wherein the one or more zinc salts comprises zinc lactate.

~~12.~~11. The formulation of Claim ~~10~~9, wherein the one or more zinc salts comprises zinc gluconate.

~~13. A formulation according to any one of Claims 1 to 12, wherein the terpene comprises farnesol.~~

~~14.~~12. A formulation according to any one of Claims 1 to ~~13~~11, ~~wherein the formulation is a sanitizing lotion,~~

~~wherein the formulation~~ further comprises glycerine in an amount ranging from 1.5% to 3.5% by weight of the formulation,

~~wherein the formulation further comprises~~ dimethicone in an amount ranging from 0.5% to 2.0% by weight of the formulation, and

~~wherein the formulation further comprises~~ one or more additional emollient compounds.

~~15.~~13. A formulation according to any one of Claims 1 to ~~14~~12, wherein ~~said~~ the formulation is free of triclosan.

~~16. A formulation according to any one of Claims 1 to 15, wherein the formulation further comprises alcohol in an amount ranging from 8% to 20% by weight of the formulation.~~

~~17. A formulation according to any one of Claims 1 to 15, wherein said formulation is free of alcohol.~~

~~18. A formulation according to any one of Claims 1 to 15, wherein said formulation is free of both triclosan and alcohol.~~

~~19. A method for the immediate and persistent reduction of broad-spectrum microbes comprising applying a formulation according to any one of the preceding claims to a surface contaminated with a plurality of microbes.~~

~~20. The method of Claim 19, wherein the application of the formulation comprises dispensing between 0.1 and 0.8 mL of the formulation onto the surface.~~

~~21. A method according to Claim 19 or 20, wherein the reduction of broad spectrum microbes at 4 hours post-application of said formulation is achieved in the absence of reapplication of the formulation to the surface.~~

~~22. A method according to any one of Claims 19 to 21, wherein the immediate and the persistent antimicrobial effects are achieved using a single application of the formulation.~~