What is claimed is:

1. An antimicrobial composition comprising:
from 10 wt-% to 50 wt-% of a weak acid;
from 4 wt-% to 65 wt-% of a strong acid;
from 0.1 wt-% to 38 wt-% of at least one anionic surfactant comprising a linear alkyl benzene sulfonate;
from 1 wt-% to 38 wt-% of a nonionic surfactant; and
water,
wherein the composition is free of urea;
wherein the composition is a dilutable liquid concentrate having an acidic pH that is non-flammable; and
wherein the composition achieves at least a 3-log microbial reduction when used against Norovirus and wherein the composition does not require the inclusion of fatty acids to achieve the microbial reduction.

2. The composition of claim 1, wherein the anionic surfactant further comprises a C8-C22 alkyl sulfonate, and/or alpha sulfonated carboxylic acid or its ester.

3. The composition of claim 1 or 2, wherein the nonionic surfactant comprises an alkoxylated surfactant having an EO/PO block copolymer.

4. The composition of any one of claims 1-3, further comprising from 1 wt-% to 38 wt-% of at least one additional functional ingredient and the remainder comprising water.

5. The composition of any one of claims 1-4, wherein the liquid composition is a ready to use concentration comprising from 5 ppm to 10,000 pm of the at least one acid and from 10 ppm to 6,000 ppm of the anionic surfactant, and wherein the composition has a use pH from 1.5 to 4, from 2 to 4, from 2.2 to 3.5, or from 2.5 to 3.5.

6. A method of using an antimicrobial composition, comprising:
contacting the antimicrobial composition of any one of claims 1-5 to a surface in need of treatment;
wherein the method achieves at least a 3-log microbial reduction when used against Norovirus.

7. The method of claim 6, wherein the contacting is by wiping, dipping, immersing, or spraying, wherein the application of the composition does not require use of personal protective equipment, wherein the surface is a hard surface, precleaned hard surface, a surface contaminated with Norovirus, a surface contaminated with a biofilm, and/or a human or mammalian tissue, wherein the contacting provides complete kill of the Norovirus in less than 5 minutes, less than 2 minutes, less than 1 minute, or less than 30 seconds, and wherein the contacting step is at an aqueous use temperature from 4.4°C – 71.1°C (40˚F-160˚F), or from 15.6°C – 60°C (60˚F-140˚F), or from 21.1°C – 60°C (70˚F-140˚F).

8. The method of claim 6 or 7, wherein the concentrate is diluted at a rate of from 0.94 g/L (l/8 oz./gal.) to 14.98 g/L (2 oz./gal.), from 1.87 g/L (l/4 oz./gal.) to 7.49 g/L (1 oz./gal.), or from 3.75 g/L (l/2 oz./gal.) to 7.49 g/L (1 oz./gal.) to form a use solution, and wherein the use solution a use solution pH from 1.5 to 4, from 2 to 4, from 2.2 to 3.5, or from 2.5 to 3.5, and wherein a use solution comprises from 5 ppm to 10,000 ppm of at least one acid, and from 10 ppm to 6000 ppm of at least one anionic surfactant.

9. The method of any one of claims 6-8, wherein a sensor and/or indicator is employed to measure and detect at least one of the following: solution pH at which the composition loses biocidal efficacy, concentration of anionic surfactant in the use solution, fluorescence, and/or conductivity.

10. A virucidal composition comprising:
from 10 wt-% to 50 wt-% of a weak acid;
from 4 wt-% to 65 wt-% of a strong acid;

from 0.1 wt-% to 38 wt-% of at least one anionic surfactant comprising a linear alkyl benzene sulfonate;

from 1 wt-% to 38 wt-% of a nonionic surfactant; and

water,

wherein the composition is free of urea;

wherein the composition is a dilutable acidic liquid concentrate that is non-flammable; and wherein the composition achieves at least a 3-log microbial reduction when used against Norovirus; and wherein the composition does not require the inclusion of fatty acids to achieve the microbial reduction.

11. The composition of claim 10, wherein the anionic surfactant further comprises a C8-C22 alkyl sulfonate and/or alpha sulfonated carboxylic acid or its ester.

12. The composition of claim 10 or 11, wherein a use pH of the composition is from 1.5 to 4, from 2 to 4, from 2.2 to 3.5, or from 2.5 to 3.5.

13. A method of inactivating a virus, said method comprising:

contacting the virucidal composition of any one of claims 10-12 to a surface in need of treatment;

wherein the contacting provides antiviral inactivation efficacy from at least a 3 log reduction to complete inactivation within less 1 minute, or preferably less than 30 seconds when used against Norovirus, and wherein the method does not impart a residue on the treated surface.

14. The method of claim 13, wherein the composition is further effective against a small, non-enveloped virus, a large, non-enveloped virus, and/or an enveloped virus.

15. A solid antimicrobial composition comprising:

from 10 wt-% to 50 wt-% of a weak acid;

from 4 wt-% to 65 wt-% of a strong acid;

from 0.1 wt-% to 38 wt-% of at least one anionic surfactant comprising a linear alkyl benzene sulfonate; and

from 1 wt-% to 38 wt-% of at least one nonionic surfactant and/or a solidifying agent,

wherein the composition is free of urea;

wherein a use solution of the solid composition has an acidic pH and is non-flammable; and

wherein the composition achieves at least a 3-log microbial reduction when used against Norovirus, and wherein the composition does not require the inclusion of fatty acids to achieve the microbial reduction.

16. The composition of claim 15, wherein the anionic surfactant further comprises a C8-C22 alkyl sulfonate and/or alpha sulfonated carboxylic acid or its ester, or wherein the one or more acids comprise lactic acid and/or methane sulfonic acid.

17. The composition of claim 15 or 16, wherein the nonionic surfactant is an alkoxylated surfactant having an EO/PO block copolymer, and wherein the solidifying agent is PEG and/or a solidifying polymer.

18. The composition of any one of claims 15-17, further comprising from 1 wt-% to 25 wt-% of at least one additional functional ingredient.

19. A method of using an antimicrobial composition, comprising:

contacting a use solution of the solid antimicrobial composition of any one of claims 15-18 to a surface in need of treatment;

wherein the method does not require a rinse step and achieves at least a 3-log microbial reduction when used against Norovirus.

20. The method of claim 19, wherein the contacting is by wiping, dipping, immersing, or spraying, wherein the surface is a hard surface, precleaned hard surface, a surface contaminated with Norovirus, a surface contaminated with a biofilm, and/or a human or mammalian tissue, and wherein the contacting provides complete kill of the Norovirus in less than 5 minutes, less than 2 minutes, less than 1 minute, or less than 30 seconds, wherein the use solution pH is from 1.5 to 4, from 2 to 4, from 2.2 to 3.5, or from 2.5 to 3.5.

21. The method of claim 19 or 20, wherein the application of the use solution and/or handling of the solid composition does not require use of personal protective equipment and/or wherein the contacting step is at an aqueous use temperature from 4.4°C – 71.1°C

(40˚F-160˚F), or from 15.6°C - 60°C (60˚F-140˚F), or from 21.1°C - 60°C (70˚F-140˚F), and wherein the use solution comprises from 50 ppm to 6000 ppm of the at least one acid, and from 10 ppm to 6000 ppm of the anionic surfactant.

22. The method of any one of claims 19-21, wherein a sensor and/or indicator is employed to measure and detect at least one of the following: solution pH at which the composition loses biocidal efficacy, concentration of anionic surfactant in the use solution, fluorescence, and/or conductivity.

23. A solid virucidal composition comprising:
from 10 wt-% to 50 wt-% of a weak acid;
from 4 wt-% to 65 wt-% of a strong acid;
from 0.1 wt-% to 38 wt-% of at least one anionic surfactant comprising a linear alkyl benzene sulfonate; and
from 1 wt-% to 38 wt-% of at least one nonionic surfactant and/or a solidifying agent, wherein the composition is free of urea;
wherein the solid composition provides a use solution that is a dilutable acidic liquid concentrate that is non-flammable; and
wherein the composition achieves at least a 3-log microbial reduction when used against Norovirus, and wherein the composition does not require the inclusion of fatty acids to achieve the microbial reduction.

24. The composition of claim 23, wherein the anionic surfactant further comprises a C8-C22 alkyl sulfonate and/or alpha sulfonated carboxylic acid or its ester.

25. The composition of claim 23 or 24, wherein a use pH of the composition is from 1.5 to 4, from 2 to 4, from 2.2 to 3.5, or from 2.5 to 3.5.

26. A method of inactivating a virus, said method comprising:
contacting the solid virucidal composition of any one of claims 23-25 with an aqueous source to generate a use solution;
contacting the use solution to a surface in need of viral inactivation;

wherein the contacting of the surface provides antiviral inactivation efficacy from at least a 3 log reduction to complete inactivation within less 1 minute, or preferably less than 30 seconds, when used against Norovirus.

27. The method of claim 26, wherein the composition is further effective against a small, non-enveloped virus, a large, non-enveloped virus, and/or an enveloped virus.