We Claim:

1. A synergistic antimicrobial composition comprising zinc pyrithione and zinc salt of pyridine carboxylic acid, their tautomeric forms, isomers, polymorphs, salts and solvates and mixtures thereof.

2. The synergistic antimicrobial composition as claimed in claim 1, wherein zinc pyrithione is present in an amount ranging from 0.01-50% w/w.

3. The synergistic antimicrobial composition as claimed in claim 1, wherein the zinc salt of pyridine carboxylic acid is present in an amount ranging from 0.001-30% w/w.

4. The synergistic antimicrobial composition as claimed in claim 1, wherein the weight ratio the zinc salt of pyridine carboxylic acid to the zinc pyrithione is in the range from about 1:300 to about 50:1.

5. The synergistic antimicrobial composition as claimed in claim 1, wherein the zinc pyrithione have an average size of particle ranging from 0.1 microns to about 20 microns.

6. The synergistic antimicrobial composition as claimed in claim 1, wherein the said composition is present in the form of or is incorporated into various personal care and industrial formulations.

7. The synergistic antimicrobial composition as claimed in claim 6, wherein the said composition is present in an amount ranging from 0.001-10% w/w based on the total weight of the formulation.

8. The personal care and industrial formulation as claimed in claim 6, selected from the group consisting of various personal care formulations and medicaments for the treatment of the skin and/or the hair, like shampoos, creams, lotions, sprays, tonics, gels, paste, mousses, serums, oils, solid or liquid soaps, shower gels and hair conditioning and/or moisturizing, hair strengthening, hair drying, hair colouring, hair shaping and hair dyeing compositions, face lotions, body lotions, moisturizing compositions, sun protection compositions, makeup preparations, shaving preparations and aids, hand cleansers, water-less hand sanitizer and facial cleansers, powders, anti dandruff and /or anti fungal hair care and the likes; coatings, paints, varnishes, stains, renders, latices, polymer dispersions, adhesives, cleaning products, lignosulfonates, chalk slurries, mineral slurries, ceramic masses, adhesives, sealants, products containing casein, products containing starch, bitumen emulsions, surfactant solutions, motor fuels, cleaning products, pigment pastes and pigment dispersions, inks, lithographic fluids, thickeners, toiletries, water circuits, liquids associated with paper processing, liquids associated with leather making,

liquids associated with textile production, drilling and cutting oils, hydraulic fluids, cooling lubricants, in can preservative and the likes.

9. The synergistic antimicrobial composition as claimed in claim 1, further comprising one or more pyrithiones.

10. The synergistic antimicrobial composition as claimed in claim 9, wherein the pyrithione is selected from the group comprising of sodium pyrithione, silver pyrithione, copper pyrithione, iron pyrithione, aluminum pyrithione, calcium pyrithione, potassium pyrithione, magnesium pyrithione, barium pyrithione, and combinations thereof.

11. An antimicrobial personal care formulation comprising:

a) water,

b) surfactant from the group consisting of anionic surfactant, cationic surfactant, non-ionic surfactant, amphoteric surfactants or a combination thereof,

c) zinc pyrithione, in an amount of from 0.01% to 2.0%, based upon the weight of the formulation, and

d) zinc salt of pyridine carboxylic acid at a concentration of from 0.001% to 5%, based upon the weight of the formulation.

12. The antimicrobial personal care formulation as claimed in claim 11, further comprising one or more components selected from a solubilizer, dispersant and/or a rheology modifier and/or a suspending agent, diluents, humectants, pH regulators, preservatives, perfumes, skin active agents and/or scalp modifiers, hair growth and/or hair loss preventive agents, sunscreens, UV absorbers, vitamins, herbal extracts and the likes.

13. An antimicrobial coating and/or paint formulation comprising:

a) water,

b) a base medium comprising resin selected from the group consisting of vinyl, alkyl, epoxy, acrylic, polyurethane, polyester resins, and combinations thereof,

c) zinc pyrithione, in an amount of from 0.01% to 5.0% based upon the weight of the formulation, and

d) zinc salt of pyridine carboxylic acid at a concentration of from 0.001% to 10% based upon the weight of the formulation.

14. The synergistic antimicrobial composition as claimed in any of the claims 1, 11 or 13, wherein the zinc salt of pyridine carboxylic acid is selected from the group comprising of zinc salts of 2-pyridinecarboxylic acid; 3-pyridine carboxylic acid; 4-pyridinecarboxylic acid; 2,3-pyridinedicarboxylic acid; 2,6-pyridinedicarboxylic acid; 2,5-pyridinedicarboxylic acid; 3,5-pyridinedicarboxylic acid, their tautomeric forms, isomers, polymorphs, salts and solvates and mixtures thereof.

15. A hair care formulation comprising the synergistic antimicrobial composition as claimed in claim 1, a skin care formulation comprising the synergistic antimicrobial composition as claimed in claim 1, a medical formulation comprising the synergistic antimicrobial composition as claimed in claim 1,a fabric care composition comprising the synergistic antimicrobial composition as claimed in claim 1, a cutting oil comprising the synergistic antimicrobial composition as claimed in claim 1, a coolant system comprising the synergistic antimicrobial composition as claimed in claim 1, a paint comprising the synergistic antimicrobial composition as claimed in claim 1, a coating comprising the synergistic antimicrobial composition as claimed in claim 1, an adhesive comprising the synergistic antimicrobial composition as claimed in claim 1, a caulk comprising the synergistic antimicrobial composition as claimed in claim 1, a sealant comprising the synergistic antimicrobial composition as claimed in claim 1, a wet-state preservative comprising the synergistic antimicrobial composition as claimed in claim 1, a hard surface cleaner comprising the synergistic antimicrobial composition as claimed in claim 1, a wood product comprising the synergistic antimicrobial composition as claimed in claim 1, or a plastic product comprising the synergistic antimicrobial composition as claimed in claim 1.

16. An anti-dandruff hair care formulation comprising the synergistic antimicrobial composition as claimed in claim 1.

17. A coated substrate wherein the said substrate is coated with the synergistic antimicrobial composition as claimed in claim 1, wherein the substrate is selected from the group consisting of wood, metal, plastic, wall and combinations thereof.