

23. Title: Antimicrobial formulation for porous and non-porous substrates

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Keywords: Antifungal, Antibacterial, Antiviral, Antimold, Personal hygiene, Hospital

Domain: Healthcare

Summary: An antimicrobial formulation coating composition and its preparation method is provided. The coating composition can be water or alcohol-based or a combination of both. This coating composition can be used for both porous and non-porous substrate. It provides a broad-spectrum antibacterial formulation which is resistant to normal wear and tear. Examples of substrates/surfaces may be metals, wood, plastic, glass, ceramic or sun mica etc. The application of coating composition is simple and does not require any special equipment.

Advantages:

- » The coating composition displays antibacterial, antifungal, antiviral, and antimold activity
- » It does not impart undesirable color to the substrate
- » It can effectively prevent transmission of micro-organisms to humans
- » It is useful for long term protection of surfaces from bacteria and viruses
- » It is abrasion proof

Applications: Sanitization of surfaces in hospital, development of formulation that do not result in resistance in micro-organisms, can be applied on tables, chairs, door knobs, railings, lifts, bags, hospital surface.

Scale of development: Functional antimicrobial formulation developed and its efficacy demonstrated in Laboratory on various porous and non-porous substrates.

Technology Readiness Level: 4

IP status: Indian Patent Application 202011054296