
Nanotechnology Based Antimicrobial Product HYDRAGUARD PLUS Will Dominate and Replace Disinfectants during Pandemic

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Advanced NanoTech Lab, a specialty chemical manufacturer based from India, has developed a durable antimicrobial nano coating branded as 'Hydraguard Plus' that lasts up to 90 days and can be extended up to 365 days.

Antimicrobial coatings became the need of the hour to protect the surfaces and build structures from the virus. The antimicrobial coating has gained more relevance during the current time because of its safeguard and various other functions such as detection of coronavirus.

Antimicrobials are generally understood to be chemical substances. Antimicrobial active substances also include ionizing radiation or technically produced surface structures.

Each of the variants inhibits or alters one or more of the following cell functions of microorganisms:

1. Cell wall synthesis
2. Protein synthesis
3. Cell membrane functions
4. Nucleic acid synthesis (genetic code)

The antimicrobial coating is the best possible alternative to these chemically hazardous disinfectants to deal with the rapidly growing problem.

Generally, the nanotechnology-based antimicrobial coating is very competent in killing bacteria and viruses. This technology is usually supported by different metal ions such as silver, gold, and other halides, etc. These ions can get attached to the film of cells and intervene with bacterial biotransformation to build pathogen-free surfaces.

The nanotechnology-based antimicrobial coating is one of the sustainable alternatives of chemically rich disinfectants.

HYDRAGUARD PLUS is a durable antimicrobial coating system that is non-toxic, transparent, nano-leaching, self-curing system, and its rare non-migrating technology works 24/7 to constrain bacteria's growth fungi, algae, infection on surfaces like glass, metal, plastic, stones, ceramic, etc.

The nano-spikes that are developed on the surface help to break down the cell wall of microorganisms and is thus rendered harmless. HYDRAGUARD PLUS is tested for physical abrasion and also with weatherometer testing from renowned laboratories in [India](#), and astonishing results were delivered.

This means that even after 90 days, it can last without running thin its antiviral potency. It can kill 99.99 per cent of bacteria and viruses like E-bola, MS2, and many more for 90 days making disinfectants obsolete.

"During COVID-19 's current health crisis across the world, it was absolutely essential for us to focus our expertise in the chemistry of R&D team on products that can help reduce the spread of harmful viruses and make them available as soon as possible to Schools, Business Infrastructure and healthcare facilities," said Rohit Rajput, Technical Director of [ADVANCED NANOTECH LAB](#).

Advanced NanoTech Lab's product is certified as per international standards test for antibacterial and antiviral efficacy against viruses and bacteria as per ISO 22196 and ISO 21702.

The product is also tested for a surrogate of the SARS COV 2 virus by a certified laboratory. For more details please visit [here](#).

Read the [original article](#) on BusinessWire [India](#).