

# Surface Protection

Industries are challenged with providing a safe environment for workers, students, visitors, guests and customers.

## The DeOdorPRO

Antimicrobial CoverShield technology has proven it is effective in adhering to surfaces to form an antimicrobial protective barrier that protects and prolongs the life of the items being treated.

Easy to Implement- The Antimicrobial CoverShield is designed to be sprayed either directly onto surfaces, or for soaking textiles.

From Product development throughout launch CoverShield support includes state of the art microbiological testing, regulatory expertise, marketing assistance and an unsurpassed quality control program.

Proven Durability & Safety- The keystone of CoverShield is a micropolymer silane technology that molecularly bonds- directly and durably- to the substrate.

- A non-leaching antimicrobial that does not migrate from the surface
- Easily applied in a wet process and can be co-applied with other finishes
- Proven history with more than 30 years on consumer products and successful use in indoor environments
- Organisms can not build up resistance to create super bugs.
- Physically controls microorganisms on contact and remains prematurely affixed to the surface, providing durability to multiple washings
- Unlike conventional antimicrobials, it won't transfer onto your skin or leach into the environment
- Registered for use with EPA and other regulatory agencies worldwide.



### Case Study: The Arthur G. James Cancer Center Hospital & Research Institute at Ohio State University

#### The Disaster:

Just before it's opening in 1990, a water pipe ruptured on the 12th floor of this 12-story building releasing more than 500,000 gallons of water. Despite high efficiency air filtration and a chlorine-based disinfectant fog throughout the building, large numbers of fungi and bacteria were retrieved from the air and surfaces at all levels of the hospital.

#### The Treatment:

All accessible interior surfaces (including carpeting, ceilings, walls, above ceiling space, furnishings, elevator shafts and mechanical and electrical chases) were treated with the CoverShield antimicrobial.

#### The Results:

More than 80% of the tested sample sites saw a 99% reduction in microbes. The facility was free of odor and its appearance unaffected by the extensive application of a surface antimicrobial. Initial air samples retrieved greater than 2800 CFU/m<sup>3</sup> despite aggressive cleaning and air filtration efforts.

One year later, retrievals averaged 0.08 CFU/m<sup>3</sup>. Two years later, retrievals averaged 0.04 CFU/m<sup>3</sup>. All newly added or modified surfaces were treated with CoverShield antimicrobial and have lasted for five years between applications.



## Blanket & Textile Protection

An industry study compared blankets treated with the QS72-5 Antimicrobial CoverShield technology to blankets that were untreated. The studied bacteria represented a wide spectrum of Gram (+) and Gram (-) organisms capable of producing staining, deterioration, odors and potentially sickness.

### Simulation Study:

CoverShield treated and untreated towels were used to towel off sweat from healthy males after one hour of intense exercise. This was conducted to simulate febrile diaphoretic patients. After the incubation period, it was shown that the untreated samples had three times the bacteria as the treated.

### In-Use Study:

CoverShield treated and untreated blankets were studied at a North Carolina 24-hour care facility. The treated blankets showed a 95% reduction in organisms compared to untreated controls. The reduction in organisms on the stressed blanket samples indicates the effectiveness of the CoverShield in protecting hospital blankets during actual handling and use.

Additional data has been generated by university, medical and industrial laboratories representing some of the most extensive micro-biological work performed on antimicrobial treated substrates for use in the medical community.

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