

WHITE PAPERS

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EXECUTIVE SUMMARY

The Pure Maintenance patented dry fog technology is a proven method of significantly decreasing or eliminating mold spores, fungus and bacteria from a facilities, surfaces, air, HVAC units and furniture. The products used are effective and safe. The treatment method is efficient and thorough and have proven to be a viable long term solution.

INTRODUCTION

The two step procedure creates a more effective treatment method than traditional tear out procedures.

- Dry Fog Treatments not only eliminate surface mold and pathogens but also eliminate airborne spores and microbes as well.
- The information in this document will provide information on the products and solutions used as well as the method of dispersement.
- With use of the information below it is determined that the dry fog process is effective against mold, bacteria and virus.

Dry Fog

Dry Fog technology is an effective form of disbursement because it atomizes solutions to change a liquid substance into a gas substance. The liquid now has the ability to fill the volume of space and stay suspended in the air with a long enough dwell time to destroy microbes on surfaces or airborne. The particle size created in the dry fog process is smaller than 7 microns. The size of the particle is critical not only in filling the volume of space but also in not getting surfaces wet. A particle this size dissipates very quickly while maintaining an adequate dwell time.

InstaPURE Process

Using the Dry Fog Delivery System for the InstaPURE process removes pathogens from surface areas as well as those that are airborne. Using an EPA classified cold sterilant, the solution is pumped into the air to fill the volume of space. The acidic nature of the peracetic solution breaks down the outer membrane and cell wall of pathogens, microbes, mycotoxins and mold spores. The cell structure of each organism falls apart and creates what science refers to as inert matter without form or function. The process of denaturing occurs in under 10 minutes for 99.999% of pathogens.

EverPURE Process

Using the adjustable Dry Fog Delivery System for the EverPURE process provides an anti-microbial residual protection. Using an EPA classified antimicrobial solution the patented adjustable dry fog machine can create a larger particle size with the intent to adhere to surfaces rather than fill the volume of space. The silicone based antimicrobial uses a mechanical kill rather than the off-gassing of poisonous silvers to continue providing protection to new mold and pathogens introduced after the treatment. In a research study conducted by the Army Corps of Engineers a facility treated show a healthier environment 6 months after the treatment than immediately following the procedure.

Testing and results

Over 5,000 facilities have now been treated using the afore mentioned technology. All 5,000 facilities tested by multiple independent labs, showed lower mold and bacteria levels than prior to the treatment and in over 99% of the case studies mentioned the mold levels were lower in the facility after the treatment than they were outside at the time of treatment.

The Army Corps of Engineers conducted a study in which the effectiveness and longevity of the treatment process against mold was tested by government engineers as well as independent microbiologists. The facilities tested returned a 99% reduction in both air borne mold counts as well as surface spore counts.

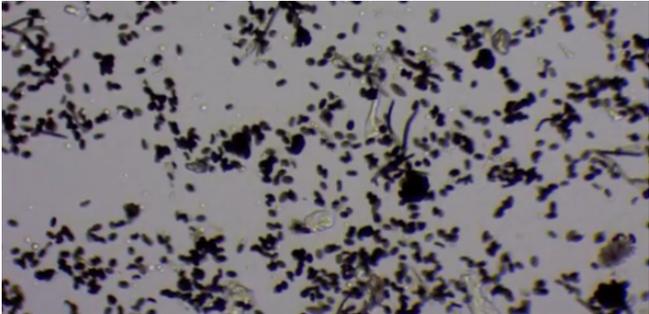
In house research studies done by Pure Maintenance show visual evidence of the denaturing process as well. Images are attached in the final section of this document.

Safety and Data testing have been done on each product used in the two part system and are available upon request.

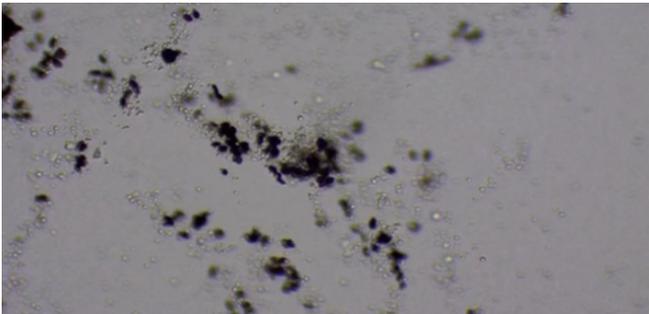
PROVEN TECHNOLOGY

Microscopic view of mold spores during treatment.

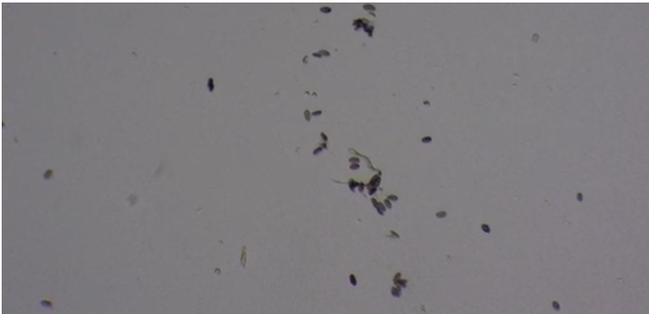
TAPE TESTS



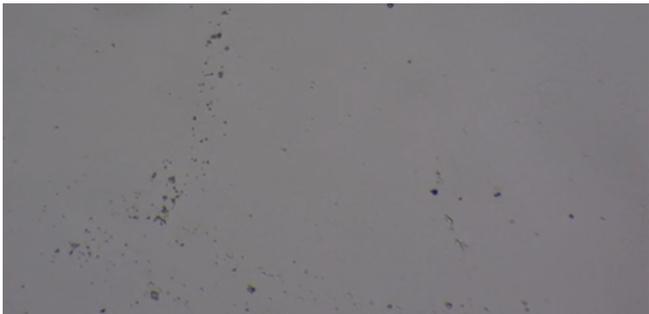
Before treatment



5 minutes into treatment



1 hour into treatment



After treatment