

The COVID-19 pandemic presents us with an unprecedented opportunity to reevaluate the products and processes used throughout our interior spaces. As employee health depends on a safe and clean work environment, interior products containing antimicrobial chemicals have been suggested as a possible solution to aid in fighting the spread of disease. While Maharam recognizes the urgency of promoting safety however possible, below is our perspective on this group of chemicals.

Our Approach

Guided by utmost transparency, Maharam has always opposed the deliberate use of misinformation regarding the attributes of products and practices. We believe that this principled approach is fundamental to supporting clients to make informed decisions. To this end, we use a rigorous vocabulary to articulate the characteristics of our products and avoid claims that might misrepresent their attributes.

Due to the lack of measurable, documented results involving antimicrobial additives in real-world application, we do not claim that our textiles with added antimicrobial agents help prevent infection. Research indicates that regular and thorough cleaning and maintenance of interior spaces in addition to frequent handwashing, is the best way to help prevent the spread of any disease, including COVID-19.

History

Historically, antimicrobial chemicals used in topical finishes, backing, and content have been used to protect a textile from the growth of bacteria and degradation rather than preventing the spread of infection. While antimicrobial additives are shown to be effective in inhibiting the growth of bacteria in a laboratory setting, a thorough review of scientific literature reveals no evidence that textiles containing antimicrobials assist in preventing infection or lowering infection rates. To make this claim about any textile would require its registration as antimicrobial by the EPA.

Additionally, there is growing concern that antimicrobial additives may be more harmful to the environment than we realize. Antimicrobial chemicals can contain chlorinated organic and organotin compounds in addition to heavy metal compounds which are considered to be potential endocrine disruptors that mimic human hormones and interfere with a body's normal function. Research regarding antimicrobial technologies and their impact on the environment is still emerging so it's important to make choices that will not result in unintended health risks.

Antimicrobial Efficacy Testing

The test method AATCC 147 measures the antimicrobial efficacy of textiles using one type of bacteria. We have performed this test on nonwoven textiles both with and without antimicrobial additives and after repeated testing, found that all nonwoven textiles passed this test when clean and in a lab setting. Testing was conducted with only one bacteria strain; there is no evidence to suggest that these textiles would respond to another type of bacteria similarly. Further, when soiled, all textiles—even those with antimicrobial additives—provide a food source for bacteria.

Antimicrobial additives do not have any bearing on the survival window of a virus on a surface. Once a virus lands on a surface, it starts to lose efficacy. Though results can vary widely by surface, in general, after twenty-four hours, the vast majority of viruses are no longer infectious and after seventy-two hours, research indicates either trace levels of virus, or no detection at all. The sooner a surface is disinfected, the shorter the survival period is—indicating that cleaning and maintenance protocols are far more critical.

Cleaning and Maintenance

Cleaning involves the removal of visible soil from objects and surfaces using water with detergents or enzymatic products. Cleaning is a form of decontamination that renders the surface safe to handle or use by removing organic matter, salts, and visible soils, all of which interfere with microbial inactivation.

Disinfecting refers to killing a high percentage of the germs on a surface or rendering them incapable of reproducing. Disinfecting is less effective than sterilization, which is an extreme physical and/or chemical process that kills all types of life.

The CDC dictates how cleaners and disinfectants should be used. Therefore, users should read labels carefully to ensure the correct product is selected for the intended use and applied effectively. Disinfectants are not interchangeable: incorrect concentrations and inappropriate disinfectants can result in damage to the textile. All cleaners and disinfectants should be rinsed thoroughly from the surface of the textile in order to prevent long-term damage.