

API/MONFOIL FAQ's

Q: What makes MONOFOIL different?

A: The most fundamental difference is that MONOFOIL kills odors and microbes MECHANICALLY, as opposed to the traditional method of poisoning or burning them with caustic chemicals. This means that the molecular properties of MONOFOIL immediately pierces the cell wall of any microbe (virus, bacterial, mold, disease, etc.) it comes in contact with, and then dries to create a nano-polymer anti-microbial shield for extended kill protection. Because it is a mechanical kill, so called super bugs aren't created, and conversely, all microbes are killed indiscriminately whether they are super bugs or not.

Q: Why Certified Application, can't I just spray it myself?

A: MONOFOIL WORKS 100% OF THE TIME, BUT MONOFOIL ONLY WORKS WHERE IT IS APPLIED. This sounds obvious, but the truth is that no matter how diligently it is hand sprayed, the odds of complete coverage for a comprehensive barrier is virtually impossible to accomplish without our certified electrostatic application process. We use the same electrostatically charged spray technology as the professional car painters use to achieve consistent, even, full coverage. This ensures the full benefit of the technology so that we can guarantee efficacy. Imagine if you were asked to paint a car with a nice even coat of paint and had the choice between a quart hand pump spray bottle, or a professional air brush technology. The choice is obvious, right? We agree. Once the baseline protective coat of MONOFOIL is professionally established and killing odors and microbes 24/7, the use of the product via spray bottle on extremely high traffic areas is recommended to ensure a consistent and robust protection from odors and microbes until the next certified application.

Q: How long will the killing power last?

A: The nano-polymer bond that is formed between the MONOFOIL molecules and whatever surface it is applied, and when left untouched will remain and keep killing indefinitely. As friction is introduced to the equation, only the increased level of traffic and friction can degrade the killing power of MONOFOIL over time. To illustrate, if an entire room is treated, the ceilings and other areas that aren't touched and exposed to friction will continue to kill microbes that come into contact with those areas virtually until the building is torn down. High friction points such as door handles, table tops, seats, floors, etc. will need to be treated periodically depending on the level of traffic. The protocol that we know works, is to have an initial top to bottom professional application ensuring full coverage, followed up with a service contract over time depending on friction levels--typically on a quarterly basis, and then supported by a cleaning regimen using MONOFOIL hand spray as a part of your daily cleaning regimen.

Q: What is the active ingredient and how does it work?

A: The active ingredient in MonoFoil® is an organo-functional silane technology that physically disrupts or “disembowels” the target organism’s cell membrane on contact. MonoFoil® kills the cell through the process of lyses, wherein contact of the pathogen’s cellular wall with the MonoFoil® antimicrobial film produces cellular wall disruption. The contacting cellular wall is broken or ruptured, and the microbe is no longer able to control its internal hydrostatic pressure, resulting in implosion or explosion of the microbe, depending on ambient pressure. No transfer of chemical or chemical residues occurs during this mechanical killing process. The MonoFoil® antimicrobial coating is not depleted by killing microbes and will continue to lyses cells. MonoFoil® is a bio-static antimicrobial additive that can be built into or applied onto almost any surface or product, providing an elemental antimicrobial coating both inside and at the surface.

When built in, this protection will not wash off or wear away, giving it permanent antimicrobial product surface protection for the useful life of the product and surface coating. There is no increased resistance to MonoFoil® on subsequent exposure and no increased mutagenicity or creation of super bugs.

Q: Is it really safe? Will it affect my eyes or skin? What if I inhale or ingest it?

A: MonoFoil® has undergone rigorous acute toxicity testing as required by the U.S. EPA for antimicrobials. It has been found to have no untoward effects, except for expected mild eye irritation from the MonoFoil® antimicrobial solution. Further testing concluded that MonoFoil® has an extremely low toxicity profile and is not a dermal irritant, skin sensitizer, or ingestion or inhalation hazard. When compared to competitive antimicrobials, the safety of MonoFoil® Antimicrobial is unique in that it contains no VOCs, polychlorinated phenols, or heavy metals.

In biocompatibility testing, the MonoFoil® showed no mortality or evidence of systemic toxicity from the extracts in the NAMSA USP Systemic Toxicity Study. It also showed no evidence of causing cell lysis or toxicity in the NAMSA Cytotoxicity Study using the USP Agar Diffusion Method. The MonoFoil® Antimicrobial label has been approved by the EPA with an unconditional approval.

Q: What is the history of MONOFOIL?

A: The base technology was originally developed by Dow Chemical, and was specifically designed for inclusion in textiles during the manufacturing process. The formula was sold along with all exclusive IP rights to a company called Aegis Environmental, an R&D firm that specialized in textiles, woven and non-woven. In 2010, former U.S. Marine Veteran Nate Richardson, owner of Coeus Technology, became the largest independent formulator for Aegis (Dow formula owners), while it was being used as an imbedded protective shield for military uniforms during

manufacturing. Coeus Technology then acquired the original IP and subsequently came forth with its own unique MonoFoil® formulation which exhibited increased efficacy, safety, stability, and durability. It became quickly evident that the potential applications of a non-toxic long-term mechanical kill solution were far beyond textile integration antimicrobial technology has quickly grown into new world-wide markets.