



WithStand™ Antimicrobial Technology

Solutions for the Healthcare Industry

Color and Additives
Specialty Engineered Materials
Geon Vinyl Compounds

Problem Description

It is estimated that up to 100,000 deaths per year result from Hospital Acquired Infections (HAI), the vast majority of which are preventable. In addition to loss of life, microbial growth can cause odor, staining, discoloration, loss of mechanical properties, as well as other negative effects on medical devices. PolyOne WithStand™ is a customized antimicrobial product offering that is compounded into a variety of base polymers and can be a critical part of a strategy to combat surface microbe formation.

Value Solution

WithStand™ product technology provides an effective and durable compounded in solution for problems caused by microbe activity. It lowers the risk of HAI's related to biofilm formation and reduces negative effects associated with microbe growth on plastic medical device surfaces.

In addition PolyOne expertise offers the following benefits:

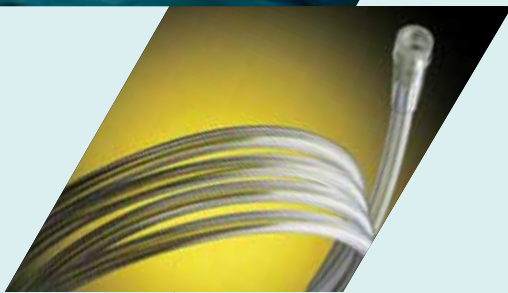
- Increased speed to market by providing a “one stop” antimicrobial solution
- Customer guidance through the “antimicrobial maze” of requirements including additive choice, product specification, claims development, and testing
- Consistent product quality utilizing PolyOne GMP production processes, experience, and expertise
- Product optimization through knowledge, technology and process expertise
- Lower product development and R & D costs

Key Characteristics

WithStand™ antimicrobial product technology can be formulated with organic and inorganic EPA approved antimicrobial additives to be effective against microbial growth. PolyOne's compounding and formulation expertise allows us to work with you to provide the “right” customized solution in a masterbatch or pre-compounded product from R & D scale to full production. Our partners provide for testing, claims development, and product support expertise and advice.

This technology can be applied to a wide variety of polymers, including:

- Olefins (polypropylene, polyethylenes)
- Polycarbonate
- PVC
- Polystyrene
- ABS
- Acetal
- Polyesters (PET, PBT)
- TPU
- TPE's
- Nylons
- Various Engineered Thermoplastics





End-Use Applications

WithStand™ Antimicrobial Products are an excellent choice for the following healthcare applications:

- Packaging
- Minimally invasive devices
- Respiratory and anesthesia
- Wound dressing
- Wellness
- Hospital furniture
- Dental products
- Many more

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