



## » PRODUCT BULLETIN

# Cesa™ Fiber Additives

## Antimicrobial Additives for Synthetic Fibers and Nonwovens

Bacteria and other microorganisms can cause unpleasant odor, discoloration and even degradation of surface qualities in textiles and nonwovens. The Cesa™ Fiber Additives portfolio includes antimicrobial concentrates that help prevent these problems by limiting the growth of microorganisms. Unlike surface treatments, they are blended into the polymer during the spin-dyeing process and are more resistant to washing and wearing off. The additive concentrates are highly recommended for applications requiring long-term protection in textiles made of PP, PET, and PA.

### APPLICATIONS

- Clothing and apparel, to avoid odors caused by sweat-induced bacteria proliferation
- Household furnishings and carpeting, to protect these products from microbial growth that can cause stains and odor

- Home textiles and rugs, to prevent mildew
- Automotive and public transportation upholstery and carpeting, to extend service life

### HOW IT WORKS

Avient offers two major types of antimicrobials for fibers: organic and inorganic.

Organic antimicrobials consist of substances that migrate within the polymer matrix, spreading over the surface of the materials where their antimicrobial action has effect. Organic antimicrobials are effective at low concentrations, offering a favorable cost/performance ratio in polymers that are processed at temperatures not exceeding 250°C (482°F).

Inorganic antimicrobials incorporate substances containing silver in ionic form, bound to inorganic compounds that regulate the diffusion of ions within the polymer mass. The silver ion is the active ingredient that interacts with bacteria. Non-toxic, non-corrosive and flameproof, inorganic antimicrobials have no negative impact on plastic and synthetic fiber processing.





## KEY BENEFITS

Avient's antimicrobial concentrates for fiber applications provide the following benefits:

- High active-ingredient loading which translates to excellent efficacy at low let-down ratios
- Easily withstand 50 washings in ISO 20743 standard tests
- Also applicable for bi-component technology
- Low levels of abrasiveness means higher process performance—reducing cost in the spinning phase
- Can be combined with colors and with other additives (e.g., flame retardants) into a single combination concentrate for convenience
- Product guidance and technical assistance from our experts

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