

MicroBlok<sup>®</sup>  
antimicrobials



The Art & Science of Color



# MicroBlok® market applications

Plastics Color Corporation has the antimicrobial formulations you need for your polymer products. MicroBlok® is used in appliances, medical devices, and other consumer contact applications. MicroBlok impedes the growth of bacteria on surfaces of products, greatly reducing stains and odors, and impeding product deterioration.

It is an ideal inhibitor for use in products subject to high humidity such as those intended for kitchen and bath environments, as well as outdoor uses including furniture and decking. Additional product uses include sponges, bath mats, plastic gloves, scrub brushes, and footwear.

MicroBlok is appropriate for virtually any molding or extrusion application and can be custom formulated for any special manufacturing process.

MicroBlok has undergone rigorous laboratory testing under ISO 22196:2011. This ISO test measures the growth of bacteria within a 24-hour period on the tested plastic substrates. These tests measure the inhibition of bacteria, fungi, molds, and other microbes on the tested plastic substrates.

Plastics Color's MicroBlok antimicrobial technologies are engineered into resins during the compounding process, eliminating the need for secondary steps. It's a safe and sure way to deliver microbe-fighting products to you without any additional material modifications on your part. And for your convenience, we offer two types—silver based and zinc based.





## MicroBlok® S

The silver ions within MicroBlok S are dispersed uniformly throughout the polymer matrix. These silver ions create a large “internal” specific surface within the polymer and this creates an extremely high efficiency antimicrobial action. These silver ions are not depleted during the inhibition process, thus the antimicrobial effect of MicroBlok S is not diminished over time.

Plastics Color’s MicroBlok S product line is custom blended in a wide variety of resins. And although it can be used in any resin, the most common usage is in TPU, PC, ABS, PP, and PE. MicroBlok S is stable at any polymer processing temperature.

## MicroBlok® Z

MicroBlok Z contains a zinc compound whose anti-fungal effect is derived from its ability to disrupt membrane transport by blocking the proton pump that energizes the transport mechanism. This creates an extremely high efficiency antimicrobial action.

The zinc compounds within MicroBlok Z are not depleted during the inhibition process, thus the antimicrobial effect of MicroBlok Z is not diminished over time. MicroBlok Z is stable below 240 degrees Celsius. Ideal resins for MicroBlok Z include those with lower melting temperatures including TPE, TPU, PE, and PP to name a few.

Antimicrobial plastics formulated with antimicrobials help suppress the growth of odor and stain-causing microorganisms on the treated plastic, but they are not intended to be a substitute for good hygiene or to prevent foodborne or infectious illnesses.

# about us

## plastics color



Since 1964, Plastics Color has been a

pioneer in an industry constantly moving forward. Delivering color concentrates, plastic additives, and master batches is just the beginning of our story. We partner with you, from concept to commercialization, to develop world-class solutions for your users - no matter what industry you serve.

We collaborate at the earliest stage of product development to answer challenges before they become real problems. We immerse ourselves into your operation, creating solutions for everything from the product itself to the packaging to the production to the storage.

Our global standard for raw-material supply underpins quality assurance at all of our manufacturing facilities. For us, product consistency is the universal language.

We are particularly proud of our leading role in today's "plastics evolution." Fully equipped and accredited laboratories deliver customized support in processing, material selection, and physical testing. Enhanced correlation of color matching and quality control are givens as we understand color is critical to your business. Our accelerated R&D process allows for production breakthroughs.

### our services

- solutions center
- color matching
- lab services
- design assistance
- clean compounding facilities
- toll compounding
- necessary certifications
- technical expertise
- regulatory guidance



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