

Challenge Accepted.



**ANTIMICROBIAL
PROTECTION AND
VIBRANT COLOR,
ALL IN ONE STEP**

AVIENT™ **» CASE STUDY: SMARTBATCH™ SOLUTIONS**





ANTIMICROBIAL TECHNOLOGY, CUSTOM COLORS AND PERFORMANCE ADDITIVES IN ONE MASTERBATCH.

THE CHALLENGE

A global leader (“OEM”) in personal care products was developing its first entry into the Patient Mobility market and was looking for ways to gain a competitive edge and offer superior value to its customers. Its final design concept incorporated antimicrobial protection and allowed consumers to express themselves by choosing a series of color options.

The distinctive color chosen for the several components of the personal care device presented unexpected challenges and setbacks, however. Multiple components, each made from different materials, did not appear to be the same color. As a result, the design team at the OEM struggled to find a supplier who could achieve tight color matching tolerances across diverse polymeric materials. In fact, color harmony was critical to maintaining its brand image and reputation for quality.

More complexities arose: the addition of an antimicrobial ingredients had an adverse effect on the color harmony. Keeping color harmony was essential, but more importantly, the OEM needed to demonstrate antimicrobial effectiveness to validate performance claims.

THE SOLUTION

The OEM approached Avient with its challenge. After developing a deep understanding of the customer’s needs, Avient’s team quickly went to work to formulate a custom OnColor™ color and then added Cesa™ WithStand™ antimicrobial technology to make a single Smartbatch™ masterbatch that passed all of the product’s challenging requirements. This combined additive and color technology not only solved the color

harmony challenge across all polymers used in the various components of the personal care device, but also accelerated testing because the Cesa WithStand antimicrobial material used had been pre-tested for polymeric integrity. Avient has compiled extensive data that enabled the OEM to shave weeks off the product development timeline and save nearly \$50,000 in potential antimicrobial product protection testing fees. The resulting Smartbatch solution was developed specifically for the OEM’s patient mobility product, but was so effective that the OEM has plans to incorporate this technology into additional devices currently being developed.

THE IMPACT

- FLEXIBILITY through wide range of color options
- PROTECTION of product through antimicrobial technology
- SPEED to MARKET through supplier expertise
- COST REDUCTION through simplified processing
- CONSISTENT performance through all-inclusive, one step masterbatch

Each Smartbatch solution is custom formulated to incorporate color, antimicrobial technology and UV stability in one material, simplifying their manufacturing process and delivering consistent performance.

To learn more about Smartbatch solutions, contact Avient at +1.844.4AVIENT (1.844.428.4368).