

ENHANCE PROTECTION &
INHIBIT BACTERIAL GROWTH

WITHSTAND™ ANTIMICROBIAL SOLUTIONS FOR ELECTRONIC ACCESSORIES

The use of electronic accessories is growing by leaps and bounds, and that isn't likely to change. For example, on average, Americans now check their cell phones 47 times per day¹—that's a lot of times to touch a phone case that has been shown to carry 10x more bacteria than a toilet seat²! Studies have found serious pathogens on phones, such as streptococcus, MRSA, and E. coli, so the importance of protecting cases, game controllers, television remotes and other accessories is paramount.

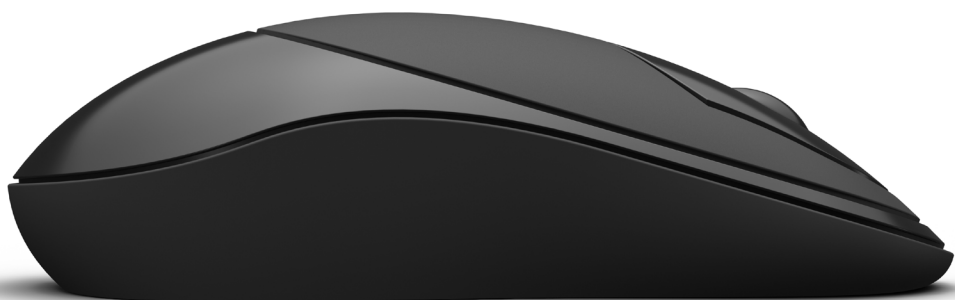
WithStand™ antimicrobial additives are designed to be molded into plastic components to enhance product performance. These antibacterial and antifungal additives reduce growth of bacteria, mold and fungus on the surface and through the thickness of the plastic part. They may also help to reduce odor or discoloration in certain applications.

Efficacy performance and regulatory requirements are met in a wide range of resins compatible with WithStand antimicrobial technology. Specifically, these additives have been proven to be effective inhibiting E. coli and MRSA across these resins:

- TPE/TPU
- HDPE
- POM
- PC
- PET
- ABS
- PP

Custom formulations can be validated for various resin types, and under specific processing conditions, at an independent testing lab to ensure results in commercialization. Avient technology centers across the globe offer regulatory support and product stewardship expertise to help qualify products.

WithStand antimicrobial additives can be combined with colorants or other functional additives in a single masterbatch or liquid solution to get the exact performance needed. They are available for processes including extrusion, injection molding, blow molding, rotational molding and thermoforming.



1. <https://www2.deloitte.com/us/en/pages/technology-media-and-telecommunications/articles/global-mobile-consumer-survey-us-edition.html>

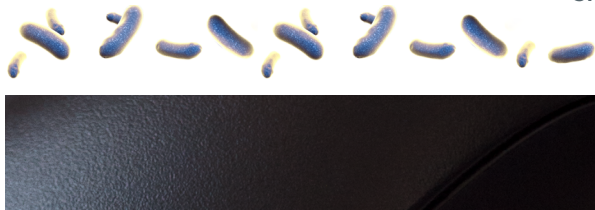
2. <https://cals.arizona.edu/news/why-your-cellphone-has-more-germs-toilet>

ANTIMICROBIALS FOR PLASTICS

Effective in reducing bacterial growth across a range of polymer resins



Side View



Bacteria does not attach to surface of part molded with WithStand



Bacteria attaches to surface of part molded without WithStand



www.avient.com

To learn more, visit www.avient.com or call +1.844.4AVIENT (1.844.428.4368).



Copyright © 2020, Avient Corporation. Avient makes no representations, guarantees, or warranties of any kind with respect to the information contained in this document about its accuracy, suitability for particular applications, or the results obtained or obtainable using the information. Some of the information arises from laboratory work with small-scale equipment which may not provide a reliable indication of performance or properties obtained or obtainable on larger-scale equipment. Values reported as "typical" or stated without a range do not state minimum or maximum properties; consult your sales representative for property ranges and min/max specifications. Processing conditions can cause material properties to shift from the values stated in the information. Avient makes no warranties or guarantees respecting suitability of either Avient's products or the information for your process or end-use application. You have the responsibility to conduct full-scale end-product performance testing to determine suitability in your application, and you assume all risk and liability arising from your use of the information and/or use or handling of any product. AVIENT MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, either with respect to the information or products reflected by the information. This literature shall NOT operate as permission, recommendation, or inducement to practice any patented invention without permission of the patent owner.