

# Allegion bactericidal finish

Copper alloy-based door hardware solutions for a cleaner public environment

In an unpredictable world preparedness is often your best defense. However, the level of change needed to ready our public spaces for a new reality wrought by a pandemic, few can have predicted. But where you need healthier solutions for door hardware, Allegion can help.

# High touch hardware featuring bactericidal copper surfaces

Introducing CuVerro Shield<sup>™</sup> by Aereus Technologies, a hardware finish that continuously kills bacteria<sup>1</sup>24 hours a day. This advanced, copper-based surface technology is now available on a wide portfolio of products from Allegion brands you know and trust. As a metal to metal bonded surface, it can be applied to the specific areas of door hardware most commonly touched creating a visually distinctive finish that provides 24/7 antibacterial protection. It is a durable, cost-effective, medical grade solution that's easy to clean, and continuously works to kill 99.9% of bacteria<sup>1</sup> on the hardware surface.

 Laboratory testing shows that, when cleaned regularly, CuVerro surfaces kill greater than 99.9% of the following bacteria within 2 hours of exposure: Methicillin-Resistant Staphylococcus aureus, Staphylococcus aureus, Entrerobacter aerogenes, Pseudomonas aeruginosa, E. coli O157:H7 and Vancomycin-Resistant Enterococcus faecalis (VRE).



## Secure, healthy environments go hand in hand

Bacteria resides on every surface we touch. Many harmful bacteria strains can persist a surprisingly long time on dry, hard surfaces such as the high-touch metals of door hardware. Allegion's portfolio of products bring best in class security to all types of openings. And now, Allegion secure solutions can also serve as healthier solutions for your facility's public spaces.

#### Persistence of bacteria on dry surfaces<sup>1</sup>

Acinetobacter spp.	3 days to 5 months
C. difficile	5 months
Enterococcus spp.	5 days to 4 months
Staph aureus	7 days to 7 months

### A proactive, bactericidal solution that works $24/7^2$

This non-toxic, bactericidal surface is made possible using a unique, high-copper-content alloy finish made by CuVerro and applied by Aereus Technologies, specialists in antimicrobial solutions. Its one-time application bonds to hardware metal mechanically without altering the underlying design. This specialized process creates a thin, even layer of the CuVerro copper alloy that will last the life of the product under normal wear conditions to provide an EPA registered bactericidal surface proven to kill greater than 99.9% of tested bacteria within two hours of exposure.<sup>2</sup>



https://bmcinfectdis.biomedcentral.com/articles/10.1186/1471-2334-6-130#Tab1

- 1. 2. Laboratory testing shows that, when cleaned regularly, CuVerro surfaces kill greater than 99.9% of the following bacteria within 2 hours of exposure: Methicillin-Resistant Staphylococcus aureus, Staphylococcus aureus, Enterobacter aerogenes, Pseudomonas aeruginosa, E. coli O157:H7 and Vancomycin-Resistant Enterococcus faecalis (VRE). EPA Test Protocol performed by an independent lab for the Copper Development Association, Inc.
- З
- Recommend cleaning with Hydrogen Peroxide, 70% isopropyl Alcohol, or a standard quaternary ammonium-based cleaner. Using a citric-acid or alcohol quat-based cleaner will not affect the bactericidal properties but may discolor and/or result in an etched appearance of the surface. http://www.researchtrends.net/tia/abstract.asp?in=0&vn=10&tid=41&aid=5817&pub=2016&type=3
- 4. 5. Aerosol and Surface Stability of SARS-CoV-2 as Compared with SARS-CoV-1 N Engl J Med 2020; 382:1564-1567

#### **MRSA Count on Copper and Stainless Steel Plates**

## Why copper

There are many products that can provide some level of antimicrobial protection. Silver ion based coatings are most common and proven to prevent the growth of bacteria and fungi. However, they are not proven to actually kill bacteria. While these solutions may be effective for low traffic use in controlled environments, a copper-based solution will not only respond quickly to microbial contaminants, it will stand up to the abuses of a high-traffic entries over longer periods time.

# Allegion's copper powered surface protection is:

- **Proven:** Featuring CuVerro bactericidal copper, an EPA registered surface technology that continuously kills more than 99.9% of bacteria<sup>2</sup> within 2 hours of exposure
- **Durable:** The specialized metal bonding technique creates a thin, even copper alloy layer that will last the life of the product
- Complete: Available on an extensive portfolio of Allegion products including door locks, exit devices, push/pull locks, pull handles, and push plates
- Effective: Reduces bacteria on surface faster than non-copper based solutions when applied with effective cleaning practices
- Simple: Easy to clean<sup>3</sup> and will not tarnish

CuVerro Copper kills 99.9% of bacteria within 2 hours of exposure<sup>2</sup>

### How copper kills bacteria



The surface of the CuVerro alloy contains copper ions that are recognized by bacteria as an essential nutrient.

The copper ions enter the bacteria providing a lethal dose that interferes with normal cell function and membrane integrity.

Cell respiration/metabolism is impeded and DNA damage may occur. The bacteria can no longer consume food or reproduce and dies.

#### Copper vs. viruses

Studies have shown there are many viruses that exhibit sensitivity to copper alloy surface contact killing.4 A U.S. government-funded study conducted by scientists at the National Institutes of Health (NIH), the Centers for Disease Control and Prevention (CDC), UCLA, and Princeton University has also reported that the HCoV-19 virus remained viable for up to 2 to 3 days on plastic and stainless steel surfaces versus up to only 4 hours on pure copper.<sup>5</sup> While this research is promising, further testing would be required to support EPA-registered product label claims.

## Bactericidal copper can be applied to these popular door hardware solutions





Primary uses: Perimeter exit points and interior areas that require egress such as cross corridor openings, stairwells, office suites, and cafeterias. Available with exit push pad and exterior options for a standard pull or 03, 06 or 17 lever

**Pull handles** 

**Push plates** 



Ives push plates and pull handles are available in a variety of sizes to fit the needs of your campus or building.

Primary uses: Areas such as public restrooms, where a door is required for privacy, but the room has general access.

Note: The products shown here have not had the bactericidal copper applied to the various hardware metals. Finish may look slightly different in person. The use of CuVerro® bactericidal copper products is a supplement to and not a substitute for standard infection control practices; users must continue to follow all current infection control practices, including those practices related to cleaning and disinfection of environmental surfaces. This surface has been shown to reduce microbial contamination, but it does not necessarily prevent cross contamination.



Aereus Technologies and CuVerro Shield are trademarks of their respective companies. CuVerro is registered to make public health claims with both the EPA in the United States and the PMRA in Canada.

#### **About Allegion**

Allegion (NYSE: ALLE) is a global pioneer in seamless access, with leading brands like CISA®, Interflex®, LCN®, Schlage®, SimonsVoss® and Von Duprin®. Focusing on security around the door and adjacent areas, Allegion secures people and assets with a range of solutions for homes, businesses, schools and institutions. Allegion had \$2.9 billion in revenue in 2019 and sells products in almost 130 countries. For more, visit **www.allegion.com** 



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