

# Biomaster

## Product protection in the office

Wherever people gather together the chances of exposure to microbes and the risk of cross-contamination increase. Some workplace germ hot-spots carry more harmful bacteria than the average toilet seat.<sup>1</sup>

**Enclosed environments, where people are working or interacting in close proximity with one another, are particularly at risk of the spread of germs. With people often working or moving around public areas while ill, this can quickly lead to localised outbreaks among a larger number of people.**

- The number of sick days taken by office workers could be reduced if companies implemented a better cleaning routine and staff improved their personal hygiene. The workplace is ranked as one of the unhealthiest places you're likely to inhabit on a daily basis.<sup>2</sup>

- There are **16 million microbes** on the typical office keyboard - **about 3,295 per square inch**.<sup>3</sup>

- Most office cleaning companies don't touch computers or keyboards because they don't want to risk causing any damage. Hygiene is left to the employee - and many don't bother.

- Office workers touch their hands to their faces an average of **18 times an**

**hour.** When we touch our faces, we bring microbes from our keyboard, desktop or phone right to our respiratory and digestive systems every three and a half minutes. Bacteria and viruses couldn't ask for a better transportation system.

- There are **25,127 microbes per square inch** on the average office telephone.<sup>4</sup>

- Almost two out of three of us eat at our desks or store food in the drawer. Crumbs can accumulate and provide a giant breeding ground for bacteria. Unclean work areas can pose hazards to our health and a liability to businesses.

- The average mouse has **1,676 microbes per square inch**.<sup>5</sup>

- The typical office worker's hands come into contact with **10 million bacteria** every day.<sup>6</sup>

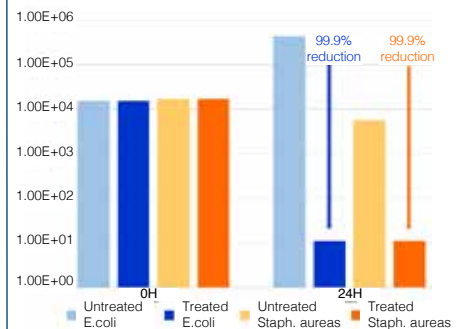
- Some dangerous microbes such as MRSA can live on a surface anywhere **between 6 weeks to up to 7 months**.<sup>7</sup>

- A shocking **32% of us don't wash our hands** after using the toilet.



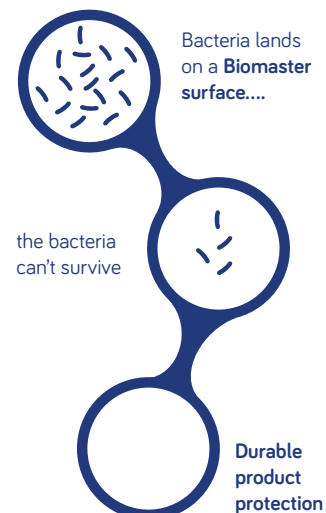
### How effective is Biomaster?

In typical tests, after 24 hours surfaces treated with Biomaster showed a reduction in the levels of E.coli and Staphylococcus aureus by over 99% achieving ISO 22196:2011.



**ISO 22196 results comparing bacterial load on an untreated surface with a Biomaster protected surface**

### How does Biomaster work?



### Our solution: 24/7 antimicrobial product protection

**Biomaster reduces the risk of cross-contamination in the workplace around the clock by inhibiting the growth of harmful bacteria on surfaces.**

- Biomaster can be introduced into almost any item found in offices offering product protection resulting in fewer bacteria on surfaces.

- The active antimicrobial agent is built into the product during the manufacturing

process, so the protection lasts for the useful lifetime of the treated article.

- The active ingredient in Biomaster only imparts antimicrobial properties and does not affect the basic colour or surface finish of any product in which it is used.

- Independently tested in thousands of applications, Biomaster is proven to inhibit the growth of most types of harmful bacteria.

<sup>1,3,4,5,6</sup> Dr. Charles Gerba, University of Arizona microbiologist

<sup>2</sup> Dr. Lisa Ackerley, hygiene expert and visiting professor at the University of Salford,

<sup>7</sup> Professor Anthony Hilton, Head of Biological & Biomedical Sciences, Aston University

# Biomaster

## Product protection in the office

Biomaster is easily introduced into almost any item, dramatically reducing the amount of microbes found on surfaces. Here are a few examples of how Biomaster is offering round the clock product protection in the office.

### Calculators



Recognising the high levels of shared use for its products, an international brand of desktop and pocket calculators incorporates Biomaster into

outer casings. Products range from simple pocket versions to powerful scientific models. The protection works 24/7 for the lifetime of the calculator is ideally suited for environments where levels of bacteria are of high concern.

### Desktops and office furniture



Biomaster can be introduced into just about any office work surface.

Multi-purpose antibacterial sheet materials are also resistant to most types of common

bacteria. They are extremely versatile and ideal for office furniture.

### Door handles and push plates



One of the most contaminated areas in an office block are door handles, bathroom fittings and lift buttons. Biomaster antimicrobial powder coatings provide a durable

solution for door handles, push plates and other fittings which are in high use.

For fixtures and fittings already in place, Biomaster antimicrobial aerosol sprays can provide effective topical protection against harmful bacteria for up to three months before reapplication is required.

### Headsets



Sweat and moisture collect on and around over-ear headphones, compressing the skin and therefore encouraging bacteria and yeast to multiply.

Headsets with inbuilt Biomaster protected components inhibit the growth of unhealthy microbes 24/7.

### Keyboards and computer mice



An antimicrobial keyboard or computer mouse incorporating Biomaster can offer around the clock product surface protection against harmful

bacteria such as MRSA, E.Coli and Salmonella.

### Paper and pens



Frequently handled documents are a vector for cross-contamination. We have developed a surface coating added during the print process to

provide effective, long lasting antimicrobial protection for paper, and a Biomaster protected laminated film available in a range of gauges and sizes.

Writing instruments may be used for months without disinfection, making them potential carriers of infectious agents. Pens treated with Biomaster antimicrobial technology provide a safer solution to reduce the risk of cross infection, lasting the lifetime of the pen.

### Tablet and mobile phone casings



Biomaster protected covers provide a sealed robust shell with internal shock protection together with rapid docking and an antimicrobial casing.

Designed for Apple iOS-based tablet computer, the hard shell case has inbuilt Biomaster antibacterial protection which reduces the risk of cross-contamination and is effective against most common types of harmful bacteria.

### Wall coatings



Biomaster antimicrobial clear glaze is as tough as quartz crystal once applied to a wall.

Utilising superior chemical bonding technology these

coatings are renowned for their permanence, durability and damage resistance. One coat has been proven to last over 20 years in demanding conditions providing antibacterial product protection for high traffic walls in high-frequency use applications.

### Washroom accessories



Regular hand dryers with standard filters can simply draw in dirty washroom air and blow it back onto your hands. The advanced design of the

Biomaster protected hand dryer filters out bacteria while the protective outer casing also reduces the build-up of surface bacteria.

### Water coolers



A known magnet for gathering all kinds of harmful bacteria.

The Biomaster protected water cooler has inbuilt antimicrobial technology in the nozzle and filter, cup fill area and control panels providing 24/7 product protection.