

ANTIMICROBIAL COFFEE CUPS

THE POLYGIENE BIOMASTER SOLUTION



The problem

Independent studies have shown that reusable vessels used for hot drinks are a breeding ground for bacteria.

- The National Infection Service at Public Health England has said that bacteria can grow in both the container and where liquid builds up around the lid and the mouthpiece.
- A study by Aston University has found that unless a standard hot drinks cup is rinsed immediately after use, the bacterial load on the surface increases significantly.
- The problem is exacerbated in hot drinks containers where dairy and sugar may be present, providing the perfect food source for bacteria.
- Research by the University of Arizona has found that 90% of hot drinks cups and mugs in the workplace carry dangerous bacteria, with 20% having traces of fecal matter.
- The same study also found that half of the bacteria found on reusable containers had the potential to harm, including gram-positive cocci, which can lead to skin infections, pneumonia, or even blood poisoning.
- The popularity of reusable coffee cups has exploded in response to the latte tax on disposable cups. Major coffee chains have also now started offering special discounts on drinks to incentivize the use of reusable cups. However, coffee shops are legally allowed to refuse to refill a coffee cup that is not clean.

“Bacteria can easily grow on the inner surfaces of a reusable coffee cup unless it is washed after use. Antimicrobial technology built into the drinking vessel significantly reduces the opportunity for bacteria to grow.”

- **Anthony Hilton,**
Professor of Applied Microbiology, Aston University.

Our solution: the Polygiene BioMaster protected coffee cup

- Antimicrobial coffee cups can be reused more safely.
- Treated with technology proven to inhibit the growth of all types of harmful bacteria.
- The active antibacterial agent is built into the cup during the manufacturing process, so the protection lasts for the product's useful lifetime.
- Our antimicrobial protection is completely safe and won't affect the taste or smell of the cup contents in any way.
- In an independent test undertaken by Aston University, cups treated with Polygiene BioMaster™ effectively reduced the residual level of bacteria on the external and internal lid and the inside of the cup.
- Polygiene BioMaster is proven to inhibit the growth of most common types of bacteria by more than 99%.



POLYGIENE
PRODUCT PROTECTION



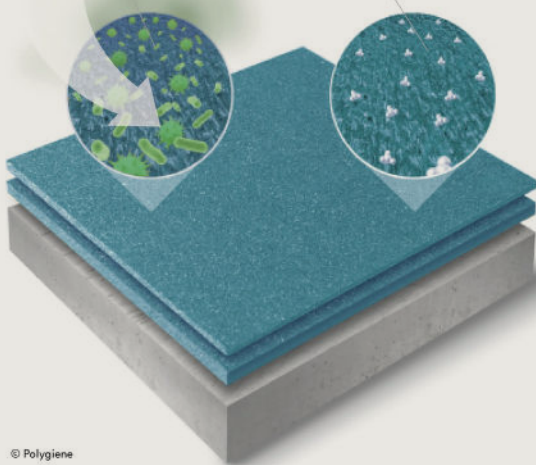
POLYGIENE
FOR MINDFUL LIVING

How does Polygiene BioMaster work?

Polygiene BioMaster is based on silver ion technology and has three modes of action. When micro-organisms come into contact with a Polygiene BioMaster protected drinking vessel, the silver ions prevent them from growing, producing energy, or replicating; therefore, they die.

WITHOUT POLYGIENE BIOMASTER™
Microbes settle and multiply on surfaces, causing degradation

WITH POLYGIENE BIOMASTER™
Silver ions actively inhibits all microbes and protects the surface



Polygiene BioMaster is incredibly durable, long-lasting, and highly active. When incorporated into the surface material, it becomes an integral part of the product and does not leach or migrate.

You can't see, smell or taste Polygiene BioMaster.

It is entirely safe and has been used successfully in several medical, food, and drinking water contact applications.

01

Polygiene BioMaster binds to the cell wall disrupting growth

02

Polygiene BioMaster ions interfere with enzyme production, stopping the cell from producing energy

03

Polygiene BioMaster interrupts the cell's DNA preventing replication



Specifying Polygiene BioMaster in your supply chain is very straightforward. We can even liaise with your manufacturers to ensure the optimum addition rate is achieved without incurring unnecessary costs.

How effective is the technology?

Bacteria lands on a treated surface.

The bacteria can't survive.

The result: durable product protection.

When incorporated into the material, Polygiene BioMaster has been proven to inhibit the growth of micro-organisms on the surface in-between cleans by up to 99.9%. ISO standard laboratory testing has shown that Polygiene BioMaster protected products are effective against a range of harmful bacteria, including Methicillin-resistant Staphylococcus aureus (MRSA) and Vancomycin-resistant Enterococcus (VRE).

Antimicrobial cup



Standard cup



Learn More



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