

# GPPS Mouldings, Films & Extrusions

## Permanent antibacterial protection for GPPS (general purpose polystyrene) mouldings, films and extrusions

Biomaster antibacterial protection inhibits the growth of harmful bacteria by releasing silver ions on demand, stopping the bacteria from multiplying. Biomaster is effective in all applications, is easily added to current manufacturing processes and is effective for the lifetime of the GPPS.

### How does Biomaster protection work?

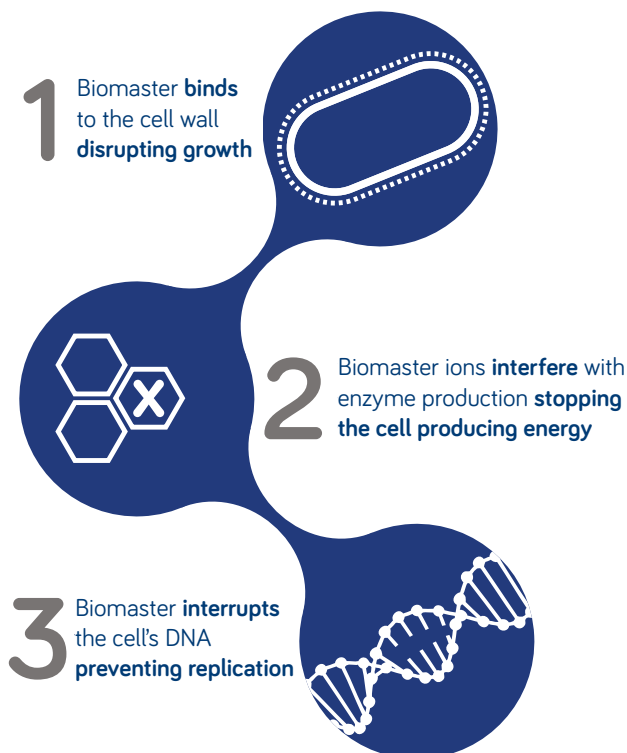
Biomaster is based on silver ion technology and has three modes of action.

When bacteria comes into contact with a Biomaster protected surface, the silver ions prevent them from growing, producing energy or replicating, therefore they die.

Biomaster is incredibly durable, long lasting and highly active.

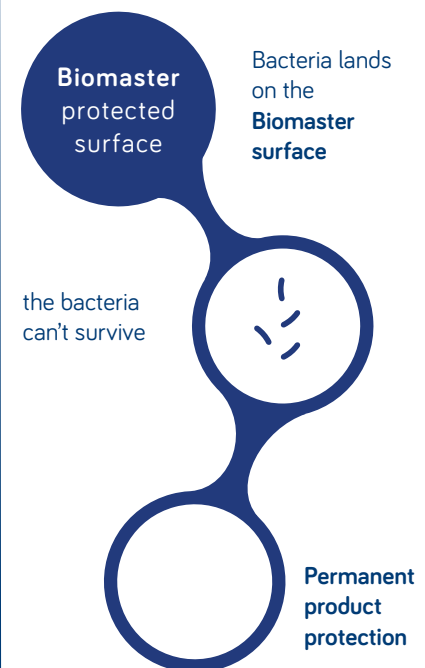
When added, it becomes an integral part of the product. Silver is inorganic and non-leaching which means that unlike organic antimicrobial technologies, it stays within the item to which it is added.

The controlled release of the active ingredient provides maximum antibacterial protection for the lifetime of the product



### How effective is Biomaster?

Biomaster additives have been proven to reduce the overall level of bacteria on GPPS by up to 99.9%.



In typical tests, GPPS treated with Biomaster reduced the levels of E.coli and Staphylococcus aureus by over 99% achieving ISO 22196:2011.

For information about polymer types, specific addition rates and antimicrobial testing of Biomaster please contact our technical team.

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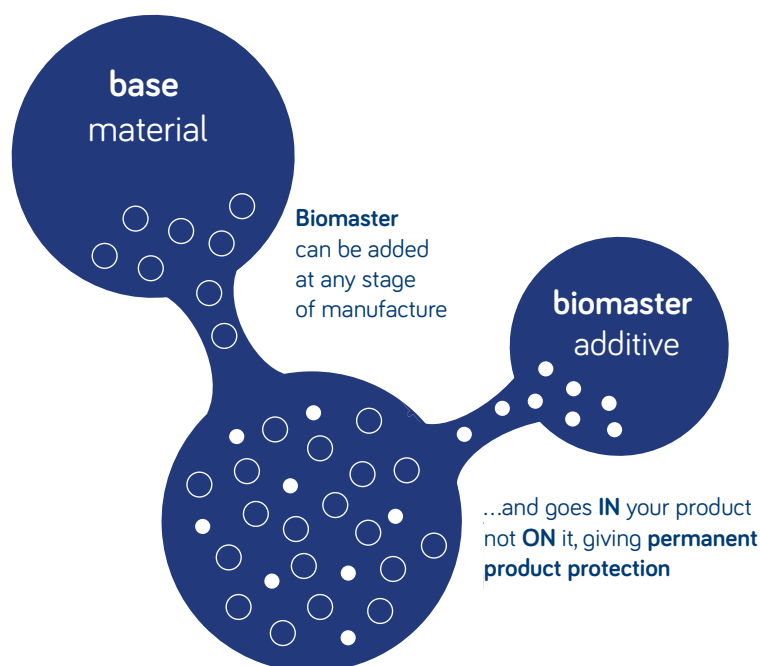
## How is Biomaster applied to my product?

Biomaster is easily added to any GPPS product during manufacture.

Biomaster only imparts antimicrobial properties and does not affect the basic colour or surface finish of any

product in which it is used.

The active ingredient in Biomaster cannot leach or wash out and lasts for the lifetime of the product.



## Our expertise

Biomaster pioneered the use of silver based antibacterial additives and is the recognised leader in antimicrobial technology.

Our range of unique compounds and formulations are blended specifically for each end application to provide maximum performance and durability.

With our in-depth experience of antibacterial additive technology, we make it easy for you to launch an antibacterial product.

We can supply free samples for you to trial and arrange testing in an independent laboratory to ISO standards.

We will discuss with you the requirements of your product, taking into account such factors as performance criteria, how and where it will be manufactured and sold before formulating a solution.

## Our global network

Our global network of distributors, chosen for their local expertise as well as their knowledge of antimicrobial additives and regulatory bodies,

is unrivalled within the industry. No matter where you are located, the experts in antimicrobial technology are there to help.



## Tested and compliant

We know that Biomaster is highly effective at reducing bacteria level but it is essential you are confident your finished product is just as effective.

Our antimicrobial testing is to the latest ISO standards and is completely independent and conducted only at leading microbiology laboratories.

All Biomaster additives are listed on the Biocidal Products Regulation (BPR), registered with the Food and Drug Administration (FDA) and approved by the Environmental Protection Agency (EPA).

## Marketing support

Our expert marketing support service is available to all customers free from licence fees.

We will give you all the marketing support needed to ensure that the launch and ongoing promotion of your antimicrobial product is both easy and successful.

Customers using the Biomaster Protected logo in their marketing material can rest assured that all the claims are valid and regulatory requirements are fulfilled.

To find out more about Biomaster co-branding please contact our marketing team.

