

Tough-PAC®



T: +44 (0) 1420 563538 E: [connect@innervisiontechnology.com](mailto:connect@innervisiontechnology.com)  
W: [www.innervisiontechnology.com](http://www.innervisiontechnology.com)

INNERVISION TECHNOLOGY LTD, UNIT 4A BEVERLEY COURT, FIVE ASH ROAD, MEDSTEAD,  
ALTON, GU34 5EJ. TOUGH-PAC, BIOMASTER & BIOMASTER PROTECTED ARE REGISTERED TRADEMARKS®

**SAFE. EFFECTIVE.**

**PERMANENT.**

# WHAT IS TOUGH-PAC WITH BIOMASTER PROTECTION




THE ACTIVE INGREDIENT IN BIOMASTER PROTECTION IS SILVER.

Silver has been used in its pure form for many centuries to prevent the growth of bacteria. At Biomaster we have developed the means and methods to safely and effectively incorporate silver into almost any material.

Incredibly durable, long lasting and highly active, when Biomaster is added into a product it is dispersed throughout the entire item, will not wash off and lasts its active lifetime. Silver is inorganic and non-leaching, which means unlike organic antimicrobial technologies it stays within the item it is added to.

## HOW DOES BIOMASTER STOP BACTERIA GROWING?

BIOMASTER HAS 3 DIFFERENT MODES OF ACTION:

-  SILVER IONS BIND TO THE CELL SURFACE; THIS DISRUPTS THE CELL WALL AND PREVENTS CELL GROWTH.
-  THE SILVER IONS ARE ATTRACTED TO THE THIOL GROUPS IN THE CELL ENZYMES; THIS PREVENTS THE BACTERIUM PRODUCING ENERGY.
-  SILVER IONS INTERRUPT THE CELL DNA; THIS PREVENTS DNA REPLICATION AND NEW CELL FORMATION.



THE BIOMASTER 3 STAGE MODE OF ACTION DOES NOT ALLOW BACTERIA CELLS TO DEVELOP RESISTANCE. THIS MAKES BIOMASTER TECHNOLOGY FUTURE PROOF AND ALSO HIGHLY EFFECTIVE AGAINST ANTIBIOTIC RESISTANT SPECIES SUCH AS MRSA.

