

What is SteriTouch®?

SteriTouch® is a comprehensive range of anti-bacterial additives designed to reduce the growth of harmful organisms such as bacteria, mould and fungi, while remaining entirely safe for even the most sensitive applications.

Based on an innovative silver technology, SteriTouch® can be incorporated into most products, either at the point of manufacturing or retrospectively through the use of coatings.

Against which organisms is SteriTouch® effective?

Independent testing has shown SteriTouch® to be effective against many organisms, including bacteria such as methicillin resistant staphylococcus aureus (MRSA), escherichia coli, pseudomonas aeruginosa, salmonella enteritidis and listeria monocytogenes, and moulds such as aspergillus niger.

How does SteriTouch® kill these organisms?

Studies of the means by which silver acts on microbial cells have demonstrated several mechanisms: interaction with sulfhydryl groups of proteins; inhibition of cell wall synthesis during mitosis (the process of cell division by which the bacteria replicates); disabling of the cell's proton pump; unwinding of cell DNA; interruption of hydrogen bonding processes within the cell.

How quickly will SteriTouch® work?

Bacteria will be exposed to the active component, ionic silver, on contact with a SteriTouch® treated surface. However, since the silver ions need to enter the cell in order to have an effect, there may be a delay before any anti-bacterial action is observed. This delay will be dependent on a number of factors, including: the level of anti-bacterial present in the treated article; the composition of the treated article (e.g. the polymer in the case of a moulded product); the environment (e.g. cool or warm, dry or humid); the organism.

The standard test used to establish anti-bacterial effect is JIS Z 2801:2000. This is a Japanese protocol, which has been generally adopted as the most effective means of comparing the performance of anti-bacterial surfaces. The protocol stipulates a test temperature of 35°C and a duration of 24 hours, but the latest SteriTouch® coatings have also been demonstrated to achieve excellent anti-bacterial performance at temperatures as low as 4°C and over time periods as short as two hours.

Will the use of SteriTouch® create yet more resistant strains of bacteria?

Bacteria have been shown to develop resistance to organic anti-bacterial agents, which typically have a single mode of action, such as Triclosan. Since the ionic silver used in SteriTouch® employs several modes of action, the likelihood of bacterial resistance is considered to be very low indeed. It is worth noting that silver has been used for its sterilising properties for many hundreds of years, yet there is no evidence of naturally occurring resistance among bacteria.

