

## **The Science of Bacti-G**

Knowledge of the chemical compositions capable of eradicating a broad range of micro-organisms has been well established, along with the fact that combinations of certain chemicals greatly enhance the biocidal properties.

However, developing a biocide capable of prolonged activity (continual re-application is not always feasible), effectiveness over a broad range of micro-organisms, and which can be successfully incorporated into a range of substrates has continually posed problems.

We have resolved these problems, with two important considerations:

- to be effective against gram positive and negative bacteria, and work as an eradicator rather than simply an inhibitor as failure to eradicate could allow resistance to be developed;
- use only those components approved by UK, European and US regulatory authorities for use in hygiene-sensitive environments from food processing to hospitals.

Bacti-G is the anti-microbial additive found in the Touch- Guard Anti-Bacterial Doorplate. It does not leech, expel odours, or separate from the substrate into which it is incorporated.

Bacti-G works by piercing the cell-wall of the micro-organism when in direct contact, thus preventing further risk of contamination or reproduction, thereby enabling it act as an eradicator rather than merely an inhibitor. While many surfaces may inhibit the growth of a range of micro-organisms the incorporation of Bacti-G will provide the added assurance of knowing that eradication is achievable.

Life-time testing has shown Bacti-G impregnated air filters remain effective for several years after manufacture, thereby outliving the usable life-span of the filter and equally effective up to the expected life-spans of the other substrates into which it is now incorporated.

# Evaluation of Bacti-G

Evaluation commenced with testing by independent laboratories to confirm the effectiveness of Bacti-G once incorporated into Touch-Guard Doorplates. Where feasible, on-site testing has also taken place. Microbial challenges concentrate upon those considered to pose a particular risk in a given environment, and the extensive testing that has taken place since 1994 has enabled us to compile substantial data on the effectiveness of Bacti-G.

**This list represents some of the micro-organisms that can be eradicated upon contact with Touch- Guard Anti- Bacterial Doorplates**

<p><b>BACTERIA</b></p> <p>Salmonella E.coli Listeria Sp Pseudomonas Sp Proteus Sp Klebsiella Sp Flavobacterium Sp Bacillus Sp Alcaligenes Sp Strep. faecalis Staph. aureus</p>	<p>Aeromonas Sp Prot. vulgaris C.perfringens Strep. mutans M.R.S.A. E.coli '0157'</p> <p><b>FUNGI</b></p> <p>Streptomyces Sp Aspergillus Sp Cephalosporium Sp</p>	<p>Fusarium Sp Paecilomyces Sp Cladosporium Sp Penicillum Sp</p> <p><b>ALGAE</b></p> <p>Chlorella Sp Oscillatoria Navicula Scenedesmus Melsira</p>	<p><b>YEAST</b></p> <p>Coniophora puteana Monilia albicans Candida Sp Rhodotorula Sp Cryptococcus Saccharomyces</p> <p><b>VIRAL CHALLENGE</b></p> <p>MS2 coliphage <i>(synthetic test virus)</i></p>
--	---	--	--